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ABSTRACT

Prepared as background material for the Organisation for Economic Co-operation and Development's review of Australian education policy on the transition from school to work or further study, this document contains a general overview of Australian education and a more detailed discussion of the following aspects associated with the subject of the review: secondary schooling; the transition to work; and further study opportunities in technical and further education, universities, and colleges of advanced education. A statistical appendix which provides data on the population, labor force, and the education system is also included. Reference is made throughout the document to data in the appendix and additional statistical information is included in some chapters. (BM)

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EDUCATIONAL POLICY AND PLANNING

TRANSITION FROM SCHOOL TO WORK OR FURTHER STUDY IN AUSTRALIA

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FOREWORD

This paper has been prepared as background material for an OECD review of Australian education policy on the transition from school to work or further study. It contains a general overview of Australian education and more detailed discussion of particular aspects associated with the subject of the review:

- secondary schooling
- the transition to work
- further study opportunities in technical and further education, universities and colleges of advanced education.

The paper also has a statistical appendix which provides data on the population, labour force and the education system. Reference is made throughout the paper to data in the appendix and additional statistical information is included in some chapters.

The Commonwealth Department of Education has prepared the paper. The interpretations and judgments contained in it do not necessarily reflect the views of the Commonwealth or State Governments or of other Commonwealth and State authorities having responsibilities for education or employment. It has been written with the primary aim of drawing issues of current concern to the attention of the OECD examiners.*

Canberra, June 1976

* The Examiners' Report, together with an account of the discussion within the Education Committee of OECD on 9th December, 1976, will be published subsequently in the series of Country Reviews of National Policies for Education.

C O N T E N T S

Foreword		
CHAPTER 1	OVERVIEW OF AUSTRALIAN EDUCATION	1
CHAPTER 2	SECONDARY SCHOOLING	29
CHAPTER 3	TRANSITION TO WORK	73
CHAPTER 4	TRANSITION TO POST-SCHOOL STUDY: TECHNICAL AND FURTHER EDUCATION	97
CHAPTER 5	TRANSITION TO TERTIARY STUDY	123
References		153
Appendix A	A Quantitative view of the Population, Labour Force and Education System	161
Appendix B	Classification of TAFE Courses	188
Appendix C	Statement of Theme	190

DIAGRAMS

CHAPTER 2

2.1	Grades in Government Secondary Schools	66
2.2	Organisation Chart of the Secondary Education Division: South Australia 1973	67

CHAPTER 5

5.1	Location of Universities, Colleges of Advanced Education and other Institutions of Higher Education	141

APPENDIX A

A.1	Age-Sex Pyramid 30 June 1974	167
A.2	Labour Force Participation Rates	168
A.3	Unemployment Rates	169
A.4	Distribution of Teachers in Primary Schools by Completed Years of Tertiary Study 1974	170
A.5	Distribution of Teachers in Secondary Schools by Completed Years of Tertiary Study 1974	170

TABLES

CHAPTER 1

1.1 Expenditure on Education 1964-65 to 1974-75 26
1.2 Public Expenditure on Education 1974-75 27
1.3 Public Expenditure on Education 1975-76 28

CHAPTER 2

2.1 Enrolments at Government and Non-Government Secondary Schools for the final Three Years 1962, 1968, 1975: All States and Territories 68
2.2 Ages of Students Enrolled in Victorian Secondary Schools: 1962-74 69
2.3 Retention Ratios in the Last Three Years of Secondary School 1964-75: All States and Territories 70
2.4 Schools by size of Primary and Secondary Enrolments 1974 71
2.5 Gross Numbers of Teachers in Government, Catholic and Other Non-Government Secondary Schools: 1970, 1972, 1974 72
2.6 Gross Student-Teacher Ratios in Secondary Schools: 1970, 1972, 1974 72

CHAPTER 3

3.1 School Leavers by Grade of Leaving by Sex 1974-75 90
3.2 School Leavers by Age of Leaving by Sex 1974-75 90
3.3 Grade of Leaving by Sex and Metropolitan and Non-Metropolitan Regions 1971-72 91
3.4 Percentage of School Leavers Proceeding to Further Study: Estimates for 1974 91
3.5 School Leavers 1974: Education Experience in May 1975 92
3.6 School Leavers, 1970 and 1974, Employed in May 1975 by Occupation 93
3.7 School Leavers, 1970 and 1974, Employed in May 1975 by Industry 94
3.8 Employees in Industrial and Services Sectors: Number in 1975 and Annual Rate of Growth 1964-74 95

CHAPTER 5

5.1 Number of Students in Universities: Actual 1946-75: Estimated 1976-78 143
5.2 Number of Students in Colleges of Advanced Education: Actual 1968-75: Estimated 1976-78 144
5.3 New Students Admitted to Bachelor Degree Courses in Universities Who Did Not Meet Normal Admission Requirements 1973 144
5.4 Percentages of Matriculation Students Rating Types of Subjects as 'Very Interesting' or 'Extremely Interesting' 145
5.5 Bachelor Degree Enrolments in Universities by Field of Study 1971-74 146
5.6 Full-Time Students in Colleges of Advanced Education by Field of Study 1971 and 1974 147

5.7	Distribution of Undergraduate Females and Proportion of Undergraduate Females in each Field of Study at Universities: 1960, 1968, 1974	148
5.8	Female Students in Certain Fields of Study in Colleges of Advanced Education 1972-74	148
5.9	Full-Time, Part-Time and External Students in Universities 1961-74 and Colleges of Advanced Education 1968-74	149
5.10	Classes Commencing After 5.00pm as a Proportion of Total Classes by University 1973	150
5.11	Pass Rates of Part-Time and Full-Time Students in Selected Universities 1972	151
5.12	External Enrolments in Tertiary Institutions by State 1974	151
5.13	Occupations of All External Students by Faculty at the University of Queensland 1973	152

APPENDIX A

A.1	Distribution of the Population 30 June 1975	171
A.2	Urban and Rural Population 30 June 1971	171
A.3	Annual Rate of Growth of Population 1961-75	172
A.4	Growth in Urban Population 1966-71	172
A.5	Population by Country of Birth 30 June 1971	173
A.6	Population by Highest Level of Schooling Attended 30 June 1971	173
A.7	Proportion of the Population Holding Educational Qualifications 30 June 1971	174
A.8	Population Projections 1976-2001	174
A.9	Civilian Population Aged 15 Years and Over by Employment Status August 1975	175
A.10	Civilian Labour Force by Age August 1975	176
A.11	Employed Persons by Industry and Birthplace February 1975	177
A.12	Employed Persons by Occupation and Birthplace February 1975	178
A.13	Persons Employed at Some Time during 1974: Number of Jobs held during the Year and Age	179
A.14	Employed Persons by Occupation and Duration of Current Job November 1972	180
A.15	Unemployed Persons by Age and Birthplace August 1975	181
A.16	Average Duration of Unemployment August 1975	181
A.17	Number of Schools in 1974	182
A.18	Number of Pupils in 1964 and 1974	182
A.19	Participation Rates in Schooling by Age and Sex	183
A.20	Percentage of Students remaining to Matriculation Grade	184
A.21	Services and Support Staff in Schools 1974	184
A.22	Number of Students at Universities: 1964, 1971-74	185
A.23	Number of Students at CAEs and Teachers Colleges 1971-74	185
A.24	Number of Students in Tertiary Institutions 1971-74	186
A.25	Enrolments in TAFE institutions by Academic Stream 1974	186
A.26	Age Distribution of Students at CAE/UNI/TAFE 1974	187

CHAPTER 1 OVERVIEW OF AUSTRALIAN EDUCATION

1.1 This chapter will outline the organisational and administrative framework of Australian education and will broadly describe planning and decision making processes operating within this framework. It also notes major trends and issues in secondary and post-secondary education and gives details of financial resources committed to education in Australia.

LEGAL RESPONSIBILTY FOR EDUCATION

1.2 The six separate States in the Commonwealth of Australia and the Commonwealth territories of Northern Territory (NT) and the Australian Capital Territory (ACT) each has its own administrative structure for education. There is a significant non-government school sector, the schools of which largely operate within the same curriculum and examinational frameworks as the government school systems. Technical and further education are almost wholly provided by government.

1.3 Tertiary education is now funded by the Commonwealth Government and State schools and technical and further education facilities are funded by State Governments with financial support from the Commonwealth. Non-government schools are subsidised by both State and Commonwealth Governments. Universities and colleges of advanced education (CAEs) are controlled by individual councils and have a substantial degree of independence.

1.4 Local government agencies play no part in educational administration and have no formal role in decision making processes. Community involvement is generally limited to parent groups which have played a large part in supplementary fund raising for individual schools as well as influencing policy at State and national levels. In the government sector school boards with parent and teacher participation, but for the present with limited powers, have been and are beginning to be established; many non-government schools have school councils or boards of management.

1.5 In constitutional terms education is primarily a responsibility of the States. Nevertheless the Commonwealth Government provides financial assistance to education in the States and has a direct constitutional responsibility for financial assistance to students, for funding research and for providing education in the Commonwealth territories. The Commonwealth also conducts educational activities incidental to its responsibilities in areas such as defence, health, immigration and social services. In fact the Commonwealth Government has become significantly involved in funding all aspects of education and, as a consequence, in influencing national education priorities. The Commonwealth is able to do this through Section 96 of the Australian Constitution which provides that the Commonwealth Parliament may grant financial assistance to any State for any purpose on such terms and conditions as it thinks fit. Section 96 grants, known commonly as specific purpose grants, have been also used in areas other than education to assist the States in providing services which otherwise might be outside the scope of their resources.

1.6 The provision of education services and facilities has increasingly taxed the resources of the States since the Second World War, due mainly to immigration and the post-war 'baby boom' and to a steady growth in participation rates in both post-compulsory school and post-secondary education. A case for aid from the Commonwealth, mainly for schools, was presented in 1961, and revised in 1963 when the State Ministers of Education, acting as the Australian Education Council (see below), issued 'A Statement of Some Needs of Australian Education'. Subsequently, in 1969 and in the context of increasing aid from the Commonwealth particularly to tertiary institutions, the States again decided to conduct a survey of each State's educational needs for a five year period, including the education of children up to the completion of secondary schooling, and the preparation of teachers. (Non-government school organisations were invited to conduct their own surveys along similar lines to the States. Liaison was maintained to achieve 'a reasonable comparability of standards'.)

1.7 The State Ministers introduced their report on government school needs with the statement:

> Great concern has been felt for some time by the Ministers for Education of the six Australian States at the wide gap between what they can see to be the needs in education and the extent to which State Governments are able to provide for those needs.

The Commonwealth, although it supported the survey, did not at that time take up the question of the large scale supplementation of education in the terms set out in the report.

1.8 The disparity in financial resources between the Commonwealth and the States results mainly from the Commonwealth Government's control of income taxes. In 1942 under the exigencies of war the States made over to the Commonwealth their rights to the collection of income taxes. State sources of income are charges such as payroll tax and other State indirect taxes and general purpose funds from the Commonwealth by way of grants, some of which are aimed at equalising the fiscal capacity of the 'smaller' (e.g. in population terms) States in relation to the 'larger' States. State loan borrowings, for capital purposes, are also subject to agreement within the Loans Council, which comprises the States and the Commonwealth (the latter underwrites and raises the loans). It is in this context and to assist the States in areas of particular need that the Commonwealth has made grants to the States to be expended for purposes specified in the appropriating Acts.

1.9 Although the Commonwealth's commitment to assistance to education has developed particularly since the Second World War, the process began in the late 1920s with assistance to research. During the war the Commonwealth made assistance available to students in order to increase rapidly the number of technically trained people required for defence puposes. After the war assistance was extended to demobilised troops and, for the first time, to the tertiary institutions in which they enrolled. In addition general student assistance was provided following the war in the form of competitive means-tested awards under the Commonwealth Scholarship Scheme which was formally established, following an interim scheme, in 1957.

1.10 The Mills Committee of 1950 was the first to formulate a cost-sharing arrangement with the States as the basis of Commonwealth assistance to universities. Subsequently the Murray Committee (the Committee on Australian Universities) appointed in December 1956, reported an increased need for financial support to universities, and its recommendations included triennial funding to encourage forward planning, and the establishment of a commission which was to advise on assistance to, and to co-ordinate the balanced development of universities. These recommendations were accepted by the Commonwealth Government of the day.

1.11 The Martin Committee (the Committee on the Future of Tertiary Education in Australia) recommended in 1964 that tertiary education in Australia be further developed and diversified, and recommended the development of a system of 'colleges of advanced education'. The Commonwealth Advisory Committee on Advanced Education, established in 1965, was replaced in 1971 by the Commission on Advanced Education.

1.12 The Commonwealth began assistance to secondary schools, both government and non-government, with programs aimed at up-grading physical facilities and equipment in science laboratories and libraries. In 1964 the Science Facilities Program was introduced and the Secondary Schools Libraries Program followed in 1969. In 1964 the first of the States, in the face of considerable controversy, began the provision of State government funds to non-government schools in the form of per capita grants. Such opposition, largely based on the premise that such funds should be spent on the government system rather than on subsidising those who had chosen not to send their children to government schools, is now rather muted. The Commonwealth began paying per capita grants for recurrent expenditure purposes to non-government schools in 1970. Provision was subsequently made for grants for general capital expenditure to both government and non-government schools.

1.13 The process of federal involvement and of the level of resources committed to education accelerated rapidly during the period 1972-75. The Commonwealth established two further national commissions to advise on Commonwealth assistance for primary and secondary education and for technical and further education. The four Commonwealth education commissions are discussed more fully below.

1.14 Federal-State financial relations and associated administrative arrangements have been a matter of political debate for some time and, following the change of Commonwealth Government in December 1975, are currently under examination. Preliminary agreements have been reached which could mean a substantial change in the form and balance of federal-state financial relations. The extent to which the new Government's 'federalism' policies and the agreement being negotiated between the Commonwealth and States will extend an independent revenue-raising power to the States could be a key factor in arrangements relating to education.

1.15 It can be seen that despite the constitutional responsibilities of the States for education and the fact that the States have established and developed educational provisions unaided

except in the relatively recent past, the Commonwealth now plays an important role in Australian education. Its priorities are established from a national viewpoint and may or may not agree with those of individual State Governments. The attachment of conditions to some educational grants to ensure that the Commonwealth's priorities are observed has been the source of some differences with the States.

1.16 Additionally, the Commonwealth's recent involvement in funding schools and technical and further education and its total funding of the tertiary sectors is still a relatively new situation and many aspects of the interface between State and Commonwealth administrative machinery and procedures, let alone policies, are by no means settled and accepted by all parties. In the main, however, the States and the Commonwealth have co-operated closely and effectively.

THE STRUCTURE OF AUSTRALIAN EDUCATION

1.17 Educational organisation and administration in the States have been stretched by the world-wide post-war phenomenon of rapidly increasing numbers of students at all levels of the school system, combined with a growing demand for, and participation in, post-compulsory secondary schooling and post-secondary education. Administrative structures which had developed slowly in the pre-war period have had to adjust to quantitative challenge, to a developing pluralism in Australian society (which before the Second World War was remarkably homogenous) and to developments in business and industry. This section seeks to outline general characteristics of existing State structures and the kinds of developments which have been taking place in the past decade.

1.18 Visiting educationists, such as Kandel (Impressions of Australian Education, Australian Council for Educational Research, 1938) and Butts (Assumptions Underlying Australian Education, Australian Council for Educational Research, 1961), dwelt unfavourably on what they saw as the centralised and bureaucratic nature of the structures through which education in the States has been organised and administered.

Education in the States

1.19 Until relatively recently the administrative structures for government schools in the States were remarkably similar, being controlled by a single Department of Education whose professional head, the Director-General, advised the Minister who is responsible to his government and parliament. The marked similarity of educational organisation and administration in the separate States arose out of historical, demographic and economic factors, and has resulted in educational provisions that are relatively uniform in standard despite differences between States and between regions of States in such factors as population density and wealth. Typically, the administrative structure placed considerable power in the hands of officials in central offices.

1.20 The State Departments of Education are principally concerned with schools and most also conduct technical and further education and until recent years, were responsible for government

colleges conducting teacher education. New South Wales (NSW) and South Australia (SA) have separate Departments for Technical and Further Education and the Western Australia (WA) Government is considering recommendations for the establishment of an independent authority governed by a council including professional and community representatives to take responsibility for technical and further education. A variety of agencies has also been established to co-ordinate matters related to universities and CAEs in particular. The Departments of Education as part of the State Governments are subject to the influence of bodies such as Public Service Boards, Treasuries, central purchasing authorities and departments concerned with construction. The Director-General of each Education Department is generally a professional educationist who has risen in his State's system. He leads a department usually subdivided by teaching divisions and other education services including curriculum research. Departmental officers also have usually risen through the system which they direct and lead.

1.21 Queensland, NSW, Victoria and SA have established regional administrative units headed by a director or supervisor. They are principally concerned with staffing arrangements and day to day operational details and are responsible to their Director-General. Regionalisation does not yet involve very significant devolution of power or the decentralisation of decision making processes. The regional directors have, however, only limited freedom to vary Departmental policy or to decide on financial matters. Most State Departments are moving to develop regional offices and their services and to give greater administrative responsibilities to regional directors. SA, for example, is increasing its regions from five to nine, and intends developing professional and administrative support services such as consultants, resource units and curriculum development teams. The regional administrations will be given the major responsibility for planning the provision of school buildings and for staff deployment. WA, following an experiment with a pilot scheme, intends to regionalise some of its school operations.

1.22 Also, in each State, an inspectorate acts as a link between teachers and schools and the administrators. The role of inspectors has been that of supervisors of schools, teachers and teaching standards and in that sense they have been administrators more than educational leaders. The emphasis in most States is now moving towards the educational leadership aspects of the inspector's functions, although inspectors generally are involved in the assessment of probationary teachers and of those seeking promotions.

1.23 Another feature of educational administration in the States is the existence of statutory boards established to advise Ministers in particular areas of education, especially tertiary education. Although the States no longer fund tertiary institutions these are established under State legislation and the State Ministers consult with, and are consulted by, the Commonwealth Minister and the relevant Commonwealth education commissions on questions such as funding priorities, the need for new institutions, their location and establishment and, particularly in the case of CAEs on the range and nature of courses to be offered.

1.24 Because of their development in many cases from institutions closely controlled by States CAEs have tended to operate with less independence than universities. The functions of boards of advanced education tend to be more specific and their powers more detailed than those of universities boards. Membership of boards of advanced education is generally representative of government departments such as Education and Treasury, of industry and commerce, of staff associations and professional organisations. The Martin Committee had recommended that institutes of CAEs be set up in each state to govern and develop advanced education. To date only Victoria, through the 'federal' structures of the Victoria Institute of Colleges (VIC) (made up of technological and specialist institutions) and the State College of Victoria (SCV) (teacher education colleges) has done so. WA is, at present, considering a proposal for a similar organisation of its teachers colleges.

1.25 The diversification and development of new administrative structures in education in Australia have generally, so far, been confined to the post-secondary area.

1.26 NSW, Australia's most populous state, has recently undertaken a considerable restructuring of its educational organisation. It has established a Ministry of Education, un-involved in operational or program activities which are covered by the two Departments of the portfolio, Education, and Technical and Further Education. The Ministry is to advise the Minister on the co-ordination of policy regarding the program and budgets of, and advice tendered by, the various sectors of the State's educational structure; and to act as secretariat servicing the State Education Council in particular.

1.27 The State Education Council will be chaired by the Under-Secretary of the Ministry, and will make long-term recommendations on educational policy as well as existing educational programs. Council membership is intended to include the Director-General of the Department of Education, the Director of Technical and Further Education and the Chairman of the recently reconstituted tertiary advisory board - the NSW Higher Education Board - and members drawn from parent, teacher and employer and employee organisations. The NSW Government's expressed intention is to get more people involved in the planning of education in the State. (The proposed establishment of the Council may be reviewed by the new State Government.)

1.28 SA has two Departments within the Education portfolio, Education, and Further Education, and has recently established a Council for Educational Planning and Research, a statutory body with a council of twenty-four representing the Departments of Education and of Further Education, non-government schools, tertiary institutions and professional and community interests. It is charged with promoting the development, rationalisation and co-ordination of education services. It has an executive board of eight members drawn from the full Council, and its own permanent staff. The Council has no executive or administrative powers; its role is investigatory and advisory.

1.29 The Governments of WA and Tasmania have recently received reports on the organisation and administration of post-secondary education in their States. The WA report recommended the establishment of a supervisory Post-Secondary Education Commission, the unification of the administration of the five small State teachers colleges and the establishment of a WA technical and further education authority leaving the Department of Education to concentrate on primary and secondary education. The report recommended that the Commission and the Authority be broadly representative of government, community and professional interests. No decision has yet been taken on this report.

1.30 The Tasmanian Government has accepted in principle the recommendations of the Committee chaired by Professor Karmel. In particular, the report demonstrated a concern for the provision of broad post-secondary educational opportunities in a relatively populous corner of the State somewhat distant from the other main population centres, and recommended new administrative arrangements for the co-ordination and provision of post-secondary education programs in the region. The report recommended that a small committee comprised of an independent chairperson and two other persons 'not representative of institutional interests' be established to report to the Minister on problems of co-ordinating post-secondary education. The report further recommended that for the time being a broadly based co-ordinating committee for technical and further education be established to advise the Minister. Tasmania, Australia's smallest and least populous state, will retain a single department responsible for primary and secondary education, technical and further education, recreation and adult education.

1.31 Victoria has an advisory council on tertiary education to advise the Minister on the relationship between tertiary and other post-secondary education and also on the relationship between tertiary and secondary education. Members include the Director-General and non-government school representatives as well as the chief executive officers of each university, the VIC and the SCV. The VIC oversees colleges providing a wide variety of tertiary courses, in for example, technology and business studies, while the prime concern of the SCV is teacher education.

1.32 In Queensland statutory boards advise the Minister in the areas of advanced education, teacher education, adult education and secondary studies.

COMMONWEALTH EDUCATION AGENCIES

1.33 Prior to 1966 the Commonwealth's education activities were administered through the Commonwealth Office of Education and the Education Division of the Department of the Prime Minister. The Department of Education and Science was established in 1966 and the Department of Education was set up as a separate entity in 1972. The Minister for Education has within his or her portfolio the Department of Education and the following statutory bodies: the Universities Commission, the Commission on Advanced Education, the Schools Commission, the Technical and Further Education Commission, the Commonwealth Teaching Service and the Curriculum Development Centre.

Other, non-statutory bodies include the Education Research and Development Committee, the Interim ACT Schools Authority and the Interim ACT Technical and Further Education Authority.

The Department of Education

1.34 The Department provides the Minister with advice on general educational policy, on long-term planning and on the co-ordination of national education programs. The Department provides secretariat facilities for a number of standing committees, advises the Minister on the financing of educational research and undertakes educational research projects. It operates programs of student assistance and special programs in areas such as migrant education and Aboriginal education. The Department also provides a statistical service and co-ordinates Australian education activities at the international level.

The Education Commissions

1.35 The education commissions are statutory bodies, whose members are experts appointed for fixed terms and are not the delegates of any groups or organisations. The Commissions are responsible to Parliament through the Minister. They are bodies established to inquire into and report to the Government upon educational needs and priorities in their specified areas; to make recommendations on programs and on levels of funding to be made available to the States, to non-government institutions, as well as to Commonwealth institutions such as the Australian National University and the Canberra College of Advanced Education; and to recommend the conditions upon which financial assistance should be granted. They consult widely in pursuit of their inquiries and in the preparation of their recommendations. They meet with State Ministers and their officers, with representatives of interested organisations and of institutions and invite submissions from the public.

1.36 Planning by the commissions has been by triennia, a practice adopted in part to encourage forward planning and the balanced development of educational policies and provisions. For budgetary reasons in 1975 consideration by the Commonwealth Government of the four Reports for the triennium, 1976-78, was deferred. The Commissions have now been asked to report in 1976 for a triennium 1977 to 1979, and 1976 has been regarded as a year outside the normal triennial progression. Funding of Commission programs in 1976 is intended to maintain existing standards but involves a marked curtailment of capital programs. The Commonwealth Government has recently decided to modify the earlier system of determining programs and funding for the full triennium. The new form of triennial programming will be on a 'rolling' basis. As each year is completed, plans for the remaining years of the triennium are reviewed and up-dated and initial proposals made for a new third year. Within this context there will be provision for longer-term reviews.

Tertiary Commissions

1.37 This section outlines the functions and responsibilities of the Commonwealth's tertiary education commissions, and gives brief

details of the sectors with which they are concerned. Since 1 January 1974 the Commonwealth has accepted total responsibility for the funding of tertiary institutions.

Universities Commission

1.38 The Australian Universities Commission was established in 1959. It is now known as the Universities Commission. Its Act provides for three full-time members, a chairman and two deputy chairmen, and eight part-time members and requires the Commission to consult with the universities, the States and the Commission on Advanced Education in the performance of its functions.

1.39 There are at present eighteen universities in Australia and one in the process of establishment. They are autonomous bodies established, with the exception of the Australian National University, by Acts of State Parliaments and are legally responsible for the conduct of their own affairs. The Commission recommends recurrent funds for universities by way of block grants and avoids detailed involvement in university policy and expenditure. The Commission is required, however, to promote the balanced development of the universities. The Commission considers new activities of the universities which are expensive or potentially expensive, which affect relationships with non-university tertiary institutions, which are major educational departures or which may result in the unnecessary duplication of resources. Another principal function is to undertake inquiries in response to references from the Minister.

Commission on Advanced Education

1.40 In 1965 the Committee on the Future of Tertiary Education in Australia (the Martin Committee) recommended that the tertiary level of education should be further developed and diversified. The departure from the university concept is found in the requirement that the colleges of advanced education be less oriented than universities to research and more concerned to meet the vocational educational needs of the community and thus that courses should have a strong emphasis on practical application. The Commonwealth Advisory Committee on Advanced Education was established in 1965 and was replaced in 1971 by the Australian Commission on Advanced Education, now known as the Commission on Advanced Education.

1.41 Most CAEs were developed out of existing institutions (some of which were technical colleges and some teachers colleges) which have been part of the educational scene for substantial periods. The inclusion in the system of the teachers colleges from 1 July 1973 greatly increased the number of colleges with which the Commission is concerned. There are now about eighty CAEs offering associate diploma, diploma and first degree courses and a limited range of masters' degrees. As with the Universities Commission, the Commission on Advanced Education is required to consult with the State Ministers and State co-ordinating authorities, with the officers of the colleges themselves and with the Universities Commission.

1.42 In addition to reviewing and co-ordinating CAE submissions for triennial programs, the State co-ordinating authorities, discussed earlier, have an executive function as accrediting authorities for

courses in CAEs and in recommending the approval of courses to the Australian Council on Awards in Advanced Education - a body to advise on consistency in nomenclature and comparability of standards in awards in advanced education and to register approved awards. This is a non-statutory body brought into being by joint agreement of the six State Ministers and the Commonwealth Minister.

Proposed Tertiary Education Commission

1.43 Late in 1975 the Commonwealth Government accepted a proposal for the amalgamation of the two tertiary commissions to form a Tertiary Education Commission. The structure proposed retains the present distinction between the two systems of tertiary institutions and would maintain councils for each system, subsidiary to the overall council of the Commission. Legislation was not passed to enable the amalgamation and the proposal is currently under consideration by the present Government.

Schools Commission

1.44 The funding of tertiary education has caused little of the public debate that has been aroused by the schools policy of various Commonwealth Governments. In May 1973 the Report of the Interim Committee for the Australian Schools Commission Schools in Australia (known as the Karmel Report) provided a comprehensive account of the condition of Australian schools, both government and non-government, and recommended support based on assessed needs and priorities.

1.45 The Committee outlined the philosophy on which it based its decisions and programs. In particular, the Committee defined its understanding of the widely supported goal of equality of opportunity. This had been regarded as the goal of equality of access to schools of roughly equal standards, but the Committee found a wide range of provision. It was concerned at socio-economic, cultural and geographic factors affecting equality in terms of opportunities on emergence from school, that is 'equality of outcomes'. Further details of the Interim Committee's approach to the problems of equality of opportunity and disadvantage are outlined in Chapter 2.

1.46 The programs recommended by the Interim Committee were implemented by the Schools Commission which was established in December 1973. The Commission consists of a full-time chairman appointed for up to seven years and from four to eleven members, any of whom may be appointed part-time for up to three years, and some of whom may be appointed full-time for up to seven years. There is no prescription in the Act as to the qualifications of any member, either full-time or part-time, but the individuals appointed represent, as a group, a broad range of interests and expertise appropriate to schools level.

1.47 Commonwealth grants to government schools are administered by the State Departments and over 85 per cent of funding is provided as general recurrent and general building grants for primary and for secondary education over which the States have a substantial measure of control. These grants are unrestricted except in as much as the Commonwealth Government has declared the priorities towards which funding is directed. State Ministers and Directors-General may allocate funds to areas which they consider to have highest priority. There are different emphases in the States in the expenditure of these

funds. The balance of Commonwealth funds is ear-marked for special purposes such as disadvantaged schools, special education, teacher development, etc.

1.48 Recurrent and building grants to non-government schools are administered on the advice of state planning and finance committees established by the Schools Commission in each State. These committees are made up of an independent chairperson and representatives of both Commonwealth and State authorities and of non-government schools and parents.

Technical and Further Education Commission (TAFEC)

1.49 The most recent Commonwealth initiative in post-secondary education was the establishment in 1975 of a third commission, responsible for advising the minister on technical and further education. Its members are drawn from a variety of backgrounds in industry, education, government and the professions. Its establishment followed the publication of two reports (in 1974 and 1975) by the Australian Committee on Technical and Further Education, the first of which recommended the establishment of the Commission.

1.50 The first Report contained the results of the first comprehensive survey of needs and resources in technical and further education throughout Australia and set out the philosophies and concepts which it felt essential to the balanced development of technical and further education.

1.51 Technical and further education is broadly defined as post-school education other than that sponsored by the Universities Commission and the Commission on Advanced Education, but including those technical education courses conducted in CAEs and including adult education activities outside universities and CAEs. The Commission is empowered to make recommendations regarding both government and non-government (non-profit making) institutions. The Commission is directed to take into account the emerging needs of industry, commerce and governments as they adjust to technological, economic and social change, community attitudes, the needs of individuals and the optimum use of resources.

1.52 Technical and further education has long been an area relatively neglected throughout Australia and its needs are accentuated by the accumulated consequences of low levels of funding over the years. The present emphasis in programs is on the 'technical' or more traditional aspects of technical education, but the Commission aims to promote the diversification of post-secondary educational opportunities and ultimately of 'recurrent education'. A detailed discussion of the philosophy and programs of the Committee is given in Chapter 4.

1.53 While the Commonwealth has accepted full responsibility for capital and recurrent funding of universities and CAEs, the funds it provides to schools and technical and further education are intended mainly to 'top up' State provisions by allowing for important improvements in the quality of education. Rather than fund these areas on the basis of grants matching State Government allocations according

to a formula, the Commonwealth has asked the States (and the non-government schools) to maintain their previous efforts, which implies as a minimum, the maintenance of existing expenditures at an agreed 'real' level per pupil.

OTHER COMMONWEALTH BODIES

1.54 Apart from the advisory commissions the Commonwealth Government has two further bodies, the Educational Research and Development Committee and the Curriculum Development Centre, which have considerable potential for influence on decision making and practice in Australian education.

The Education Research and Development Committee

1.55 The Education Research and Development Committee was established in 1970 to advise the Minister on priorities in educational research, to recommend the award of research grants and to propose measures for the training of research personnel. It provides the bulk of funds available for education research projects conducted outside State Departments, although State Departments are not excluded from the Committee's support. The Committee provides grants in response to applications. It also identifies important and pressing issues in Australian education policy and practice and arranges research connected with them as well as co-ordinating and integrating the activities of separate researchers working on similar projects. The Committee is also concerned to promote the dissemination and utilisation of research in practice, amongst schools and teachers.

The Curriculum Development Centre

1.56 The Curriculum Development Centre is a relatively new agency in Australian education. It was established in June 1973 by the Commonwealth Government with the co-operation of the states. An Interim Council was appointed in December 1973 to initiate the work of the Centre. The Centre became a statutory authority on 1 July 1975, the Council was appointed in August and the Director took up duty in September 1975. Among the functions of the Centre are the following:

- to advise, develop and supply school curricula and school educational materials
- to undertake, promote and assist in research into matters related to school curricula and school educational materials
- to collect, assess and disseminate information relating to school curricula and school educational materials.

At present the Centre intends to concentrate its resources on selected issues, problems and themes in the school curriculum, provide information to target populations and work in close association with State, Catholic and other non-government school authorities in the field of development activities. The Centre does not take decisions on curriculum policy, which is a matter for the authorities concerned.

Education in the ACT and NT

1.57 The Commonwealth administers education in the ACT and the NT. Previously education services in those territories were provided by means of co-operative arrangements between the Commonwealth and the NSW and SA education authorities respectively. The Commonwealth Department of Education is now directly responsible for education in the NT - a large, sparsely populated area whose two major towns Darwin and Alice Springs are almost a thousand miles apart. The NT Education Division of the Commonwealth Department is situated in Darwin. The ACT by way of contrast is a small territory whose community is concentrated in the city of Canberra. In the ACT, pending the establishing legislation, the Commonwealth Government has set up interim authorities to conduct schools and technical and further education. For the time being the secretariat services of the Interim Technical and Further Education Authority are provided by the Department, but the Interim Schools Authority has functioned as a separate agency since the beginning of 1974.

1.58 The Interim ACT Schools Authority was developed out of exhaustive public consultation and debate and is the first new schools authority established in Australia this century.

1.59 The Council of the Interim Authority is responsible only for government schools and is representative of parent, teacher, government and community interests. An important aspect of the Authority's structure is the role given to schools in decision-making in areas of staffing requirements and curriculum. School boards, representative of parents, teachers and students, consult on their school's staffing requirements in terms of the school's educational philosophy and curriculum; staff selection remains a matter for the Authority. Individual schools have greater potential freedom in curriculum matters than in most of the States.

Commonwealth Teaching Service

1.60 The Commonwealth Teaching Service was established to provide teachers for schools in the Australian territories particularly as the Commonwealth took over that responsibility from NSW and SA. The Service is establishing a career structure in which among other factors eligibility for promotion is determined on the basis of peer assessments. The Commissioner of the Commonwealth Teaching Service makes determinations on terms and conditions of employment. The numbers and types of persons needed in a school and their duties and qualifications are seen as the responsibility of the authority responsible for the particular school.

STUDENT ASSISTANCE

1.61 Assistance is available to students at secondary and post-secondary levels from both State and Commonwealth Governments. It is discussed briefly here but receives further attention in later chapters.

1.62 At the same time as it accepted responsibility for complete funding of tertiary institutions, the Commonwealth Government abolished

tuition fees for full-time, part-time and external students for all subjects which are constituent parts of courses leading to awards in technical colleges, CAEs and universities. Such fees are still payable for categories such as adult education and continuing education and may be reintroduced in 1977 for second and higher degrees with the exception of approved combined courses.

1.63 The Secondary Allowances Scheme is a non-competitive, means-tested support scheme provided by the Commonwealth, designed to assist students of families of limited means in the final two years at secondary school. In addition, all States have schemes of financial assistance to school students, mostly at secondary level, through scholarships and bursaries. Awards are usually made on the basis of a competitive examination and sometimes a means test is applied. Other government and private authorities such as the Commonwealth Department of Repatriation and the Legacy War Orphans Fund assist certain categories of students with their school education. There are also substantial governmental schemes of assistance available to groups such as children in remote areas and Aboriginals.

1.64 The present Commonwealth post-secondary scheme, the Tertiary Education Assistance Scheme (TEAS) is means-tested and non-competitive, and is available to full-time students in technical colleges, CAEs and universities. It replaced schemes based on academic merit. The level of subsidy is designed to cover the basic needs of students (and dependants) at a level that would enable them to study without inordinate financial pressure. The Commonwealth Teaching Service offers a number of non-bonded teacher training scholarships without means test.

1.65 State Government schemes for trainee teachers (which are not means tested) are by far the largest form of financial aid in addition to TEAS, and extended to approximately 50,000 students in 1974. The level of allowance paid under these schemes tends to be higher than that offered under TEAS, but most States bond recipients to a period of employment upon graduation. However, the number of awards under these schemes has been substantially reduced. Some States have introduced small non-bonded scholarships which may be held in addition to TEAS allowances.

1.66 There is also a number of scholarships, cadetships and the like offered by State Governments, statutory corporations and by the private sector. These are usually awarded on the basis of academic competition and are often limited to students enrolling in specified courses.

COMMONWEALTH-STATE CO-OPERATION IN EDUCATION

1.67 The States and the Commonwealth have achieved co-operation on a broad range of issues by agreeing on joint actions or approaches to particular matters. In the field of education the States established two bodies which provide opportunities for discussion and agreement by the governments involved. These are the Australian Education Council and the Conference of Directors-General. In 1972 the Commonwealth accepted an invitation to join these bodies.

Australian Education Council

1.68 The respective Ministers of Education usually meet three times biennially as the Australian Education Council. In addition, special meetings of the Council are called as required. The State Directors-General of Education and the Secretary of the Commonwealth Department of Education meet as a standing committee of the Council prior to each meeting to make recommendations for discussions by the Ministers. The Council is served by a small secretariat staffed from the NSW Department of Education. The Council is a consultative body. Any resolutions it makes or actions it proposes can be put into effect only through the agreement and co-operation of the governments represented. The Education Policy of the Liberal and Country Parties elected to Government in December 1975 indicated that they regard the Australian Education Council as 'the principal forum of federal-state consultation in education' and proposed to make 'greater and more effective use of it'.

Conference of Directors-General

1.69 A conference of Directors-General of Education and the Secretary of the Commonwealth Department of Education is held annually in one of the States or territories. It is serviced by a secretariat drawn from the staff of the Victorian Department of Education with the annual addition of an officer of the Education Department of the State in which the conference is being held. This also is a body for discussion and consultation.

NON-GOVERNMENT SCHOOLS

1.70 In 1974, 21.5 per cent of students attended schools other than those operated by governments. Non-government schools charge fees but these vary very widely (see chapter 2) as do the standards of their resource usage. The majority of these schools are conducted by, or under the auspices of, religious denominations. The Catholic Church conducts the largest single group, which in 1972 constituted some 80 per cent of all non-government schools, including about 90 per cent of non-government primary schools and about 70 per cent of secondary schools. Further details on the nature and operation of non-government schools and of government financial assistance to them is given in Chapter 2.

Co-ordinating Structures in Catholic Education

1.71 Catholic schools tend to fall into two groups; those owned and operated by parishes or dioceses and those owned and operated by religious orders. The diocesan schools are principally primary schools but include some high schools. Diocesan education offices have been established to supervise and co-ordinate schools under the bishop's authority. In this respect parish and diocesan schools constitute a loose system. (It is these schools, broadly, that the Schools Commission has termed 'systemic' schools.) The schools owned and controlled by orders are, by and large, autonomous, but are increasingly being co-ordinated by the newly established state-level Catholic Education Commissions.

1.72 Catholic schools have been affected by the post-war expansion of demand for education. As outlined in chapter 2 the need for forward planning, for the elimination of wasteful duplication and for support services has encouraged consultation between the various Catholic authorities and the strengthening of co-ordinating machinery. Activity at state and national level has been particularly related to seeking and responding to State and Commonwealth Government financial assistance. In 1973 the Australian Episcopal Conference established an expert committee to report on the needs for more broadly functioning administrative structures for Catholic education. Its report The Organisation of Australian Catholic Education (August 1973) recommends that state and national structures should be developed and lays down principles upon which development should proceed based upon existing institutions. These recommendations are being implemented.

1.73 The Committee and the Conference wish to preserve local autonomy and initiative as much as possible. They wish, moreover, to preserve the autonomy of religious orders as well as of dioceses and they recommend the participation of both in the suggested bodies. The limits of authority and influence between orders and bishops, between professional educators and various sectors of the administrative structure and their superiors in the church, and the role of lay persons within the administrative structure are not defined, nor does the Committee desire to do so. The Committee looks, rather, to the development of working relationships suited to the diverse needs of different areas within the rules laid down.

1.74 Diocesan offices remain the basic unit. The scope of their authority and their staffing arrangements vary widely. These offices remain responsible to their local bishops. State Catholic Education Commissions have been or are being established, serviced by state Catholic Education Offices. The state commissions (or the equivalents) aim at bridging divisions between the dioceses. They are educational policy making and administrative bodies and they are appointed by the bishops and the major superiors, acting in joint consultation, and are responsible to them.

1.75 The Committee also recommended that a national Catholic education body should be established answerable to the Australian Episcopal Conference through the Bishop's Committee for Education, a committee of Conference. The National Catholic Education Commission met for the first time in June 1974. It has twelve members including one bishop, two priests, two brothers, two nuns and four lay persons as well as the Director of the Federal Catholic Education Office. The Commission is appointed by the Episcopal Conference to formulate national policy and to provide leadership. It is to co-ordinate and present information on Catholic education in such a way as to facilitate planning, and to sponsor research and development where they are necessary on a national level. There is considerable insistence that the national body exists to serve and not control the state bodies as they in turn serve dioceses and orders.

Non-Catholic Non-Government Schools

1.76 Non-Catholic schools generally function as independent units. They are governed by school councils or boards of governors but most co-operate at state and national level and co-ordinate their

representations to governments through the National Council of Independent Schools and the organisations of school principals. The prime function of each school's governing body is the management of the school's business operation and planning for the school's development. The principal is the official link between the governing body and groups such as staff, parents, pupils and the general community.

PARENT BODIES AND PROFESSIONAL ORGANISATIONS

1.77 Throughout Australia a number of groups covering a broad range of points of view and interest contribute to educational debate and seek to influence policy and planning decisions of the State and Commonwealth governments. Given the centralisation of power to make decisions, both educational and financial, such groups which choose to, may attempt to affect policy through such activities as the lobbying of members of parliament, through deputations to Ministers and administrators, through public demonstrations and through media campaigns. Teachers have used strikes and parents have kept children home from school. One organisation has fielded candidates in state and federal elections. It is difficult to estimate the influence of any organisation or campaign, but it is true that governments and administrators sound out and consult with major organisations in the preparation of policy. Such consultations and the activities of these groups are often an important aspect of the identification and definition of issues.

1.78 Parent and citizen bodies are voluntary organisations which have traditionally worked to support the school by raising funds to supplement government allocations and to assist parent-school and parent-teacher consultations. The range and nature of parent organisation activity associated with government schools is very much defined by the various States' departmental regulations which have tended to limit parental responsibility and scope for action. However, in Victoria and the ACT for example, parental participation is being extended through increased involvement in school councils or boards. NSW has also foreshadowed community involvement in a discussion paper entitled 'The Community and its Schools' (1974).

1.79 The Australian Council of State School Organisations (ACSSO) is the main national body of citizens' organisations associated with government schools. The national body is a federation of similar state level organisations such as the Victorian Council of State School Organisations and the NSW Federation of Parents and Citizens Associations. The Australian Parents Council, though nominally non-denominational, is mainly composed of Catholic parent groups. Catholic school parents bodies in the States are known generally as parents and friends federations. State and federal level organisations for both government and non-government schools are politically active in the pursuit of their goals.

1.80 Parents of children in non-catholic, non-government schools tend to rely for formal representations on their behalf mainly on the associations of the governing bodies of their schools, the National Council of Independent Schools and on the associations of headmasters and headmistresses (these bodies also include Catholic school representation). These groups have usually been able to make their representations effectively despite their relatively low numbers.

1.81 In each State of Australia except Victoria, government school teachers are represented by a single union. In addition, many teachers belong to various professional associations. Overall membership of unions is high. (In Victoria there are three unions, one basically representing primary teachers, one secondary and one technical teachers.) These unions have tended to become more militant over the last decade in pressing their demands on terms and conditions of employment and educational issues. Consultation between governments and their authorities and the teachers' unions occurs regularly at both state and federal levels. Teachers are usually invited to take part in such activities as curriculum development and are represented on committees which examine and advise on educational matters. Policies common to most teacher unions include the separation of teaching services from public service control and teacher participation in the making of educational policy and in regulating the conditions of school practice.

1.82 Generally, teachers in non-government schools are not associated with unions representing teachers in government schools. In SA, however, the SA Institute of Teachers represents both sectors. State federations of government school teachers have joined together to form the Australian Teachers' Federation which deals with governments and the national education commissions as well as presenting a national platform and representing Australian teachers internationally.

1.83 University and CAE staffs have organisations known respectively as the Federation of Australian University Staff Associations and the Federation of Staff Associations in Australian Colleges of Advanced Education. These staff associations deal with State Governments, the federal education commissions, and represent the interests of their members nationally and internationally. Staff in technical colleges belong to associations which are generally affiliated with either state teacher or public service associations. The exception is Victoria where the Technical Teachers Association of Victoria represents technical teachers at both secondary and post-secondary levels. Most technical teacher associations are affiliated nationally in the Technical Teachers Association of Australia.

1.84 There are also professional groups such as the Australian College of Education and groups which tend to form around particular issues. Illustrative of these are the Australian Council for Educational Standards (ACES) which is an organisation much concerned for traditional intellectual and academic achievement criteria in education, and the Defence of Government Schools organisation (DOGS) which has vigorously opposed the provision of government financial aid to non-government schools. Migrant and other community groups such as the Women's Electoral Lobby have also been active in pressing their points of view.

1.85 Student organisation is at present principally confined to students in post-secondary institutions. The Australian Union of Students, the national student body, represents students at governmental level and internationally. Australia has not experienced widespread or persistent political activity amongst its secondary school students.

EDUCATIONAL RESEARCH

1.86 Systematic educational research in Australia is almost wholly a post-war phenomenon and even so educationists in Australia continue to rely heavily on research conducted abroad. Most growth in education research in Australia has occurred in the last ten years. Research is principally carried out in universities, to a lesser degree in CAEs and in the State and Commonwealth Departments of Education. Funds for research come very largely from government sources.

1.87 The State and Commonwealth Departments of Education each have research units - variously named and variously staffed - which must compete for budgetary allocations within their organisations. The greatest amount of research as reported by those departments comes in areas of curriculum development, in the preparation of textbooks, in the provision of general services to primary and secondary curriculum committees in surveys and in research into education facilities. They tend to confine themselves to research into problems related to practical issues that teachers face in the classroom and to problems related to school administration and school finance.

1.88 Mention has already been made of the Curriculum Development Centre and of the Educational Research and Development Committee and of the contribution they make to research. The ERDC's most recent disbursements for research, for the 1974-75 financial year reveal that 53.6 per cent of funds it distributed went to universities, 17.7 per cent to CAEs, 12.4 per cent to the Australian Council for Educational Research (see below) and 15.2 per cent to State departments with 1.1 per cent going to organisations representing special education interests. In that period a total of $645,788 was granted. At the same time the committee reports that of applications received for grants for 1976, containing requests for $2,308,025, the greatest number of applications, 55.4 per cent came from universities, 29.7 per cent from CAEs, 2 per cent from research institutions and 6.9 per cent from State Departments of Education.

1.89 An examination of articles published in academic journals also indicates that universities dominate the field of education research rather than CAEs in which the majority of teachers is trained. A partial explanation for this situation lies in the limited provision for research in CAEs vis a vis universities. The Universities Commission considers 'research ... an essential activity of a university. Indeed, it is the characteristic which most distinguishes universities from other institutions of higher education'. It is in universities that the majority of research workers is trained.

Australian Council for Educational Research

1.90 The only substantial education research organisation in Australia independent of tertiary institutions and government departments is the Australian Council for Educational Research (ACER). The initiative for its foundation came from the Carnegie Corporation of New York, which funded it for some ten years from its inception. The council, established in 1930, was conceived and developed at a time when there were three professors of education in Australia's six universities, when there were no research units in either universities or the State departments of education and when there were no provisions

in Australia for higher degrees in education or psychology. The Council itself is now funded by annual grants from each of the State and Commonwealth Governments and, substantially, from its own activities which include subsidised research, contract research, the provision of services and income from the sale of books, tests and other materials. Lately, its work has concentrated particularly on the development, production and distribution of tests and other measuring instruments and of materials for classroom use by pupils and teachers. The ACER publishes books, monographs and the Australian Journal of Education, the Australian Education Review and the Australian Education Index.

COMMITTEES OF INQUIRY

1.91 As has been outlined above decision-making in matters of policy and planning in education in Australia remains to a large extent centralised in governments and their administrative structures. Change to date has been largely a process of the diversification of administrative structures. These separate structures must compete for available resources and decision-making is tending to be given more public airing. Advisory bodies uninvolved in the operational administration of the areas with which they are concerned are also modifying the once exclusive Departmental power to advise Ministers.

1.92 There is a further aspect of the planning and policy decision-making process common throughout Australia to which attention should be drawn. Governments in Australia have relied heavily on the advice of expert committees established to inquire into not only particular matters but also broad educational issues. Membership of such committees commonly includes prominent educationists and experts from relevant professional and related fields and organisations such as teacher unions, universities, CAEs and parent groups. An ACER analysis of the reports of such committees indicates that governments seem to be using the device of independent committees more frequently. As at May 1973 the ACER library catalogue lists 6 reports for the 1940s, 5 in the 1950s, 43 in the 1960s and 38 to that point in the 1970s. Committees have been used to examine a wide range of educational subjects; notable amongst the resultant reports to name but a few have been those which preceded the establishment of each of the Commonwealth Education Commissions, the 1969 Karmel Report Education in South Australia, the 1970 Radford Report on public examinations in Queensland, the 1973 Campbell Report on Secondary Education for Canberra the report of the Universities Commission Open Tertiary Education in Australia and the recent reports on the organisation of post-secondary education in WA and Tasmania.

1.93 In their involvement of the public in discussions through the acceptance of submissions, in their attitudes to educational goals and objectives and in their choices of policy alternatives as expressed in their reports and recommendations these committees are a force with considerable potential for innovation and for redirection. The degree to which a committee may realise its potential depends in part on the selection of its chairman and members, the nature of the terms of reference provided and on secretariat support given to the committee. Governments are not bound to accept or adopt in full or in part the recommendations of such committees, but it is common practice for their

reports to be tabled in Parliament and published before decisions are made by governments on their recommendations, thus providing a basis for further public debate.

1.94 Not only are administrative structures changing, but in finding their experts governments are drawing on a wider range of sources such as the tertiary institutions, teacher and professional groups and community and special interest groups. The role of the expert is accentuated by the relatively limited degree of community involvement discussed above.

CURRENT ISSUES IN AUSTRALIAN EDUCATION

1.95 This section briefly draws attention to trends which have developed and issues which have emerged in Australia during the post-war period and, in particular, in the last decade. These trends and issues are discussed in more detail in subsequent chapters.

Changed Patterns of Secondary Schooling

1.96 The post-war period has produced a considerable change in the patterns of secondary schooling. Under the previous pattern children were usually streamed at the conclusion of primary school. Those judged the more intellectually able were placed in 'selective' high schools whose courses were designed to lead to entrance to universities. The remainder went to junior secondary schools (including schools with commercial and technical emphases, for boys, and home science schools, for girls). The increasingly heightened expectations of a population which saw, and continues to see, educational qualifications as the main means to a higher standard of living together with the demands of an increasingly industrialised economy constituted powerful factors for change in a system which favoured a small part of the population. Further fuel for change came from the increasing numbers of students overall, but particularly from the higher participation rates at the senior secondary level which have characterised the post-war years (See Chapter 2).

1.97 Most government and Catholic secondary schools now serve a particular geographic area and cater for the normal range of abilities. Curricula in the junior secondary years have been redesigned Subjects are often offered at a variety of levels to cater for differing abilities and interests of students. The aim has been to delay specialisation and to broaden opportunities in school and options on leaving. A greater degree of specialisation in preferred areas of study is possible in the final two years of secondary school, though students are encouraged to avoid too great a concentration in any particular area. It remains true, however, that in terms of courses offered and in the aspirations of students, as suggested by choices of course and level, the goal of entry to tertiary education continues to be prominent.

1.98 Most recently attention has been directed to freeing curricula of detailed prescription and to the considerable modification of the public examinations which once terminated junior and senior secondary school courses. These developments have occurred mostly at junior secondary level. Generally, curricula and syllabi remain

centrally prescribed but are presented in broad outline together with a statement of objectives. Teachers have increased freedom in what they teach and in how they teach and internal assessment at year 10 has been adopted in all systems. Except in Queensland, which has abolished public examinations, the States have not made significant modifications to year 12 examinations.

1.99 In general, public examinations remain a focal point of debate. Tertiary institutions now have less influence in the setting of syllabi and examinations. State authorities have been considering alternatives to examinations both for purposes of university entrance and for describing and certifying performance in school for school leavers. Movement seems to be in the direction of the provision of greater flexibility of course structures and in the range of subjects from which students may choose. Increased flexibility and freedom are revealed in innovation and experimentation and in a growing diversity in teaching stategies, including the application of open-plan techniques in secondary schools. In part, such developments are based upon a growing determination to cater for the needs and abilities of individual students. There is also an increasing awareness amongst teachers of creative or social goals and of a need to provide for the personal fulfilment of students. In short, there is growing debate as to the goals and objectives proper to secondary education and to the importance of academic performance in the context of a fuller range of human needs and development.

1.100 A corollary of these developments has been a cautious response from sections of the teaching profession and the public. A particular aspect of such concern has been for intellectual and academic 'standards'. Debate as to whether or not standards of literacy and numeracy have declined has achieved considerable prominence in the media, and concern is voiced that abandonment or modification of examinations reduces incentive for academic performance. There is considerable demand, moreover, that uniform and comparable results should be certified by public awards. Lastly, such debate poses questions as to what are proper activities to be undertaken in schools.

1.101 The present condition and appropriate roles of secondary schooling are further brought into question by the increasing pluralism in Australian society and by the apparent irrelevance of school life to the post-school experience of students. A number of studies discussed more fully in Chapter 2 suggests, amongst other things, that Australian schools do not do well in matching the growing diversity of Australian society socially and culturally. A number of students show themselves to be alienated from their schools. Projects to develop courses more relevant to the needs of such students and, in particular, to their preparation for employment are emerging, including a number of 'work experience' programs. Finally, a number of schools, both government and non-government, have been established to provide alternatives to conventional schools.

Equality of Opportunity

1.102 Many of the issues noted above are, in whole or in part, related to the issue of equality of opportunity. The Interim Committee of the Australian Schools Commission chose to define this concept in terms of increased equality of outcomes from schooling, both government

and non-government, and this concept necessarily includes the notion of the differential treatment of schools and of pupils in contrast to the traditional concept of broad equality of provision of facilities in government schools. Government financial support of non-government schools has added to the dimensions of the equality issue. Schools Commission data establish that there exists a wide range of facilities and opportunities in non-government schools. In particular, some non-government schools tend to enjoy significantly higher standards of provision in quantitative terms. Such schools receive smaller than average aid as differential Commonwealth grants have been introduced according to 'need'. At the other end of the range a number of government and non-government schools has been classified as disadvantaged and are receiving special additional funding. This classification relates to the socio-economic characteristics of the families in the school catchment area, but may also be reflected in the school's physical facilities. Differential funding is also provided for special groups such as Aboriginals, migrants and children isolated from educational facilities and opportunities.

Teaching

1.103 The characteristics of the teaching profession have also been undergoing change since the war. In general, teachers are now younger, better qualified but less experienced. In the past most teachers in primary schools qualified in two-year courses conducted by State Department of Education teachers colleges, while courses for junior secondary teachers were of three years duration. Most graduate teachers trained in universities and taught in secondary schools. Concern has been voiced at the adequacy of the training received by teachers and, in particular, at the degree to which they are prepared for the varying demands that broadened goals and objectives may make upon them. Such doubts are often expressed in terms of, and reflect debate upon, the propriety of social goals and non-academic activities and of fears concerning the achievement of fundamental skills in literacy and numeracy. A further problem in recent years has been a high turnover of teachers owing to movement between schools or resignation. Staff in non-government schools, in general, tend to be less subject to mobility than staff in government schools. Amongst government schools, those in rural areas suffer a high degree of teacher turnover.

Post-School Education

1.104 Tertiary participation rates have also increased very greatly since the war. Commonwealth support has permitted universities to expand, although quotas are still applied in particular faculties. The abolition of tuition fees and the provision of means-tested, non-competitive student assistance may be viewed in the context of easing the barriers to access to university and to CAEs. Nevertheless, socio-economic factors continue to play a role in access as those students of a middle class background are disproportionately represented amongst tertiary students in comparison to those of working class background. There are, moreover, significant variations between the States and between regions of the States in rates of participation in post-secondary education in general. In particular, participation is significantly greater amongst metropolitan dwellers than for students in non-metropolitan areas.

1.105 Many universities, aware of problems of access, have developed limited schemes of entry for non-matriculated persons of 'mature' age. Some universities also operate programs of 'early entry' assuring school students of places on the basis of teacher assessment and a report. A recent initiative is that of 'open' tertiary education. A committee of the Universities Commission has reported on the need for increased facilities for external study with freer conditions of entry.

1.106 The most obvious area of growth, however, both of the number and range of institutions and of the courses they offer has been in the advanced education sector. CAEs were specifically conceived to expand the options available to students and to meet the demands of industry and commerce for highly skilled manpower. These courses are required to have a strong vocational bias. The sector is relatively new as are some of the institutions involved. In one sense that newness underlines the fact that the advanced education sector is still evolving and has yet to establish a clearly defined separate identity within the tertiary sector.

1.107 Technical and further education is the third post-secondary sector and has been much less well financially supported than the others. At present the institutions involved - generally known as technical colleges - concentrate on trades and allied training and on sub-professional and technical courses. Recently, however, at both State and federal level considerable attention has been given to the need for a more balanced development of educational opportunities at post-secondary level: for students who do not wish to or who do not need to undertake tertiary courses; and to meet the needs of business and industry for trained personnel. One of the major emphases in this sector will be recurrent education to help people cope with the demands of rapid technology change and of the varying manpower needs of the market place.

1.108 At present the universities and CAEs dominate the allocation of resources to the post-secondary area. One problem, in particular, given present economic circumstances, will be the consequences of the development of technical and further education on both the universities and CAEs. The question of the administrative arrangements governing post-secondary education are under review at the federal level and have been the subject of the two State inquiries discussed earlier, the Partridge Report in WA and the Karmel Report in Tasmania. Each committee considered the danger that the multiplicity of agencies involved at both state and federal level - or the dominance of a particular sector - may lead to the fragmentation of efforts and perhaps the dissipation of resources. The need for rationalisation of the allocation of resources, for rational administrative structures and for the elimination of overlapping between existing institutions will constitute the challenge of the years immediately ahead.

Educational Finance

1.109 The size of the national education bill ensures that educational expenditure will attract close attention as will the policies on which expenditure is based. This is particularly so given the increases of the last few years in federal expenditure on education - particularly as that increase has coincided with a period of considerable inflation and unemployment. Recently, concern for both

has been expressed in terms of a desire for efficiency in the use of resources and 'cost-effectiveness' in the education 'industry'. In this respect, for example, additional funding for schools has not - or so some sectors of the media and public assert - resulted in significant changes. Additionally, there is a fear of a tendency to place an over-reliance on material resources, rather than on human effort, involvement and determination. There is concern that an undue emphasis on educational qualifications has developed at the expense of practical experience.

1.110 All institutions and administrations are increasingly facing demands that they be prepared to justify their decisions and their actions. As schools, in particular, develop individual philosophies and programs they will face such demands. Universities and CAEs similarly may be called upon more openly and more fully to justify both the resources they use and their goals and objectives.

1.111 The three tables following provide basic information on the amounts and distribution of national expenditure on education. The apparent significant increase in Commonwealth expenditure is partly explained by its assumption of total responsibility for the financing of tertiary institutions where previously the States and the Commonwealth shared that responsibility. It is clear that there has been a substantial increase in expenditure on education by both the Commonwealth and the States.*

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* Although the gross private sector expenditure on educational services has been increasing from year to year the net figure shows an apparent decline. The statistical and accounting bases of this are discussed in Australian Bureau of Statistics, Expenditure on Education 1973-74, Ref. No.5.44 pp. 2-4.

TABLE 1.1

EXPENDITURE ON EDUCATION
1964-65 to 1974-75

		1964-65	1971-72	1972-73	1973-74	1974-75
(1)	Commonwealth Govt Authorities (a)	106	349	444	862	1,677
(2)	State Govt Authorities (b)	534	1,319	1,542	1,661	2,050
(3)	Local Authorities	..	2	3	3	2
(4)	Total public sector	640	1,670	1,989	2,526	3,728
(5)	Less transfers to the Private Sector and purchases of existing assets (c)	37	170	215	253	317
(6)	Final Expenditure by Public Sector	603	1,500	1,774	2,273	3,412
(7)	Final Expenditure by Private Sector	128	237	252	251	274
(8)	TOTAL, EDUCATION	731	1,737	2,026	2,524	3,686
(9)	GDP	19,605	36,725	41,852	50,694	59,551
(8)	as % of (9)	3.7	4.7	4.8	5.0	6.2

(a) Including grants to State (and local) authorities for education purposes. Prior to 1 January 1974 the Commonwealth and State Governments shared the funding of universities and CAEs. From that date the Commonwealth has taken full responsibility for the financing of tertiary education which partly explains the rapid growth in its expenditure in recent years.

(b) Expenditure from general purpose Commonwealth Government grants and from States own resources.

(c) A substantial part of the transfers from the public sector to the private sector is in the nature of living allowances paid under student assistance schemes to secondary and post-secondary students. This item also includes (a) capital grants by governments to non-government schools and (b) purchases of land and existing buildings. See also the explanatory notes in the publication Australian Bureau of Statistics, Expenditure on Education, Reference No. 5.44.

Source: Australian Bureau of Statistics.

TABLE 1.2

PUBLIC EXPENDITURE ON EDUCATION
1974-75
($ million)

	Schools and Pre-schools	TAFE	CAEs	Unis	Other	Total
Commonwealth Govt						
Recurrent	343	32	250	435	149	1209
Capital	256	24	114	69	..	463
Total	599	56	364	504	149(a)	1672
State Govts (b)						
Recurrent	1485	153	5	1	199	1843
Capital	219(c)	14	2	..	..	235
Total	1704	167	7	1	199(d)	2078
Commonwealth & State Govts						
Recurrent	1828	185	255	436	348	3052
Capital	475	38	116	69	..	698
Total	2303	223	371	505	348	3750

(a) Includes expenditure associated with student assistance ($123m), adult migrant education ($6m), Curriculum Development Centre ($1m) and research programs and grants ($1m). The balance consists of departmental administrative costs and various minor programs and grants to organisations

(b) Excludes expenditure from specific purpose grants from the Australian government.

(c) Includes expenditure in respect of technical colleges in Victoria.

(d) Includes programs of student assistance ($100m). The balance consists predominantly of central office expenditure within education departments.

Source: Commonwealth Department of Education

TABLE 1.3

PUBLIC EXPENDITURE ON EDUCATION
1975-76(a)
($ million)

	Schools and Pre-schools	TAFE	CAEs	Unis	Other	Total
Commonwealth Govt (b)						
Recurrent	436	51	274	467	177	1405
Capital	262	32	94	45	..	433
Total	698	83	368	512	177(c)	1838
State Govts (d)						
Recurrent	1741	180	7	1	241	2170
Capital	272(e)	19	..	..	..	291
Total	2013	199	7	1	241(f)	2461
Commonwealth & State Govts						
Recurrent	2177	231	281	468	418	3575
Capital	534	51	94	45	..	724
Total	2711	282	375	513	418	4299

(a) Budget estimates.

(b) Figures exclude an allowance ($70m) for prospective cost increases in respect of Education Commission programs.

(c) Includes expenditure associated with student assistance ($143m), adult migrant education ($9m) Curriculum Development Centre ($1m) and research programs and grants ($1m). The balance consists of departmental administrative costs and various minor programs and grants to organisations.

(d) Excludes expenditure from specific purpose grants from the Australian government.

(e) Includes expenditure in respect of technical colleges in Victoria.

(f) Includes programs of student assistance ($114m). The balance consists predominantly of central office expenditure within education departments.

Source: Commonwealth Department of Education

CHAPTER 2 SECONDARY SCHOOLING

INTRODUCTION

2.1 This chapter gives particular attention to current trends and developments in secondary education having implications for the transition of young people from school to work or further study. Current issues in secondary schools' curricula are discussed and the adequacy of career education and vocational counselling programs in secondary schools is examined. The chapter begins with background statistical information on secondary students, schools and teachers in government and non-government sectors of secondary education. It gives details of the organisation, administration and operation of secondary education in the government systems and it describes non-government schools. The chapter concentrates on major characteristics common to all systems and to those distinguishing features which exist.

STRUCTURE AND SIZE

2.2 Secondary education in the Australian States and Territories consists of programs lasting five or six years which commence with the seventh or eighth year of schooling. Compulsory attendance is required until students reach 15 years except in Tasmania where the minimum leaving age is 16. In all States except Queensland, the full secondary program concludes with students taking a public external examination towards the end of year 12. In Queensland (and the ACT after 1976) school assessments have replaced the terminal examination. In some States a certificate is also awarded at the end of year 10. The award of these certificates is based on school assessments.

2.3 Diagram 2.1 shows grades in government secondary schools throughout Australia and the approximate average age for each grade. The diagram also shows details of the secondary school certificates awarded. In all States and Territories the non-government school sector has an average age-grade pattern which is very similar to that for government schools. Students from non-government schools take the same public examinations as government school students and receive the same certificates.

2.4 Reference has already been made earlier in this paper to the rapid expansion in secondary education which has taken place in Australia in the last twenty years and the propensity of young people to remain at school for longer periods. The following paragraphs contain selected data which illustrate the trend. They also show the extent to which the balance between enrolments at government and non-government schools, especially for senior secondary years, has changed during the period.

2.5 Table 2.1 shows enrolments for government and non-government schools in the last three years of secondary education for the years 1962, 1968, 1975.

2.6 Enrolments in all States and Territories in year 10, which may be taken to represent the end of the compulsory phase of secondary schooling, have increased by about sixty per cent during the period for government schools, while growth in the non-government sector has been at a slower rate except in Victoria where it has been roughly the same as in government schools.

2.7 Table 2.2, gives details of the age of students in secondary schools between 1962 and 1974 for one State, Victoria. Other States reveal similar trends. In government schools in 1962, 22 per cent of those attending school were above fifteen years. By 1974 this figure had increased to 33 per cent.

2.8 Table 2.3 contains selected information on retention ratios for the last three years of secondary schooling between 1964 and 1975. It is apparent from this information that growing numbers of students in both government and non-government sectors are remaining at school longer. (However, as shown in Table A19, below, participation rates by age steadied in the early seventies.) It is noteworthy that the holding power of non-government schools is significantly higher than that of government schools in all systems and that in some instances non-government retention ratios have improved more significantly than in the government sector.

2.9 Table 2.4 gives details for 1974 of the number of schools in Australia classified by the size of their primary and secondary enrolments. It shows that more than nine percent of all Australian schools cater for both primary and secondary age groups. It also reveals that government schools providing for both primary and secondary students are usually small, typically having fewer than 300 students in each category. The incidence of schools providing both primary and secondary education in the non-government sector is higher and their size range is greater. Of the schools providing secondary education, only 45 per cent of those in the non-government sector are exclusively secondary compared to almost 70 per cent in the government sector. The frequency with which non-government schools provide both primary and secondary education can largely be attributed to the spread of Catholic schools in country regions. Problems of curriculum, staffing and the kind and quality of the secondary education in such composite schools are created by the smallness of the secondary component and, in the Catholic non-government sector in particular, their continued viability is an issue of current concern.

2.10 Tables 2.5 and 2.6 have been devised from information contained in the Schools Commission's Report for the Triennium 1976-1978. They provide selected data on the number of teachers in secondary schools in Australia and the gross student teacher ratios. Catholic schools have been separated from other non-government schools in these tables.

2.11 Diagram A.5 provides basic information on teacher qualifications. About 80 per cent of teachers in government secondary schools had completed three or more years of tertiary study in 1974. The figures for Catholic and other non-government schools were about 55 per cent and 70 per cent respectively. The introduction of four-year courses for secondary teachers in many CAEs and the slowing down of the rate of growth in secondary enrolments have increased the proportion of secondary teachers who are four-year trained. This is the minimum standard aimed at by most Australian education authorities. In 1972 about 48 per cent of teachers in government secondary schools had more than three years of training; by 1974 this had grown to 58 per cent.

2.12 The Schools Commission has drawn attention to one significant feature arising from the rapid growth in the teaching force and the increased turnover of teachers. Approximately one third of the teaching staff in government secondary schools in 1974 was younger than 26 years. They were, on average, some five years younger than their non-government counterparts.

2.13 The undoubted improvement in secondary teachers' qualifications appears to have been accompanied by a growth in the number of young teachers with five or fewer years of experience. In addition, very few secondary teachers have had work experience outside the State school system apart from those in Victorian technical schools and some married women returning to teaching. One possible consequence of these factors is that the majority of young people who leave school at the end of the first stage of secondary education is increasingly being taught by teachers with limited experience. This may be a significant factor affecting the quality of junior secondary education. The greater experience of teachers in non-government schools, coupled with a greater stability in the staffing of individual schools could create more favourable circumstances in these schools. Such factors, however, are partly offset by teachers' relative lack of training and higher teacher-pupil ratios in Catholic schools.

Financing Secondary Education

2.14 Chapter 4 of the Schools Commission's Report for the Triennium 1976-78 sets out the most recent data available on the financing of school systems in Australia and it is not proposed to repeat this information in this paper. However, several significant features may be noted. The entry of the Commonwealth Government into funding both government and non-government schools and the provision of financial assistance to non-government schools by State governments during the last decade have brought about a substantial increase in resources available to schools. The effect of the implementation of the programs recommended by the Interim Committee of the Schools Commission during 1973-74 and 1974-75 and the continued effort by State authorities in the same period illustrate this clearly. In 1972-73, the year immediately prior to the introduction of these programs, the average per capita recurrent cost for government secondary schools was $535; in 1974-75 it had increased to $882. Government assistance to non-government secondary schools for the calendar years 1972 and 1974 was $166 and $257. When price increases over the periods are taken into account, these figures represent increases in real value terms of 17 per cent and 15 per cent respectively.

FEATURES OF SECONDARY EDUCATION IN AUSTRALIA

Introduction

2.15 Government secondary schooling in Australia is provided for by eight separate education systems, each having its own distinctive characteristics; non-government schools cater for almost 25 per cent of all secondary students and, as well as differing from government schools, they vary from each other depending upon their size, geographic location, religious affiliation and form of governance. There are, therefore, obvious difficulties in presenting a comprehensive picture of secondary education in Australia. This chapter does not attempt to provide an exhaustive treatment, but seeks

rather to emphasise general features and to highlight issues having a bearing on the question of transition from school to work or further study. Because of the variations between systems, many of the generalisations made in the following paragraphs are necessarily broad and will frequently not reflect precisely the current situation in particular systems.

2.16 The aspects of secondary education in government systems to be discussed are:

- centralised control and secondary schooling
- the aims and objectives of secondary education
- the comprehensive secondary school
- the secondary curriculum
- assessment of secondary students
- equality of opportunity in secondary education
- student attitudes and alternative schooling
- vocational guidance, counselling and careers education.

A separate section provides a brief description of the characteristics of non-government schools.

Centralised Control and Secondary Schooling

2.17 The pattern of centralised control and administration of government education systems which has prevailed in Australia until the very recent past has had an important impact on government secondary schools and on the nature and quality of the education they provide. As suggested in paragraph 1.19 above an important consequence has been the avoidance of marked inequalities between regions.

2.18 Generally, State education departments have had a secondary division headed by a Director of Secondary Education who is supported by professional and administrative staff frequently working in specialised branches such as staffing, curriculum, buildings, the inspectorate and so on. Diagram 2.2 shows the framework of the secondary division in one State education department.

2.19 As can be seen, the SA secondary division is largely self-contained, having its own curriculum, property and staffing units as well as the inspectorate. The division draws upon the department's administration and finance division for services in fields like personnel, salaries, supplies for schools, budgeting controls, accounts and the like. Similar administrative and organisational arrangements have existed in other State education departments, though policies vary as to whether activities like secondary curriculum are within the secondary division or are carried out by a curriculum branch with general responsibilities.

2.20 As might be expected with organisational frameworks like the one described, administrative control of most aspects of secondary

education has tended to rest with the head office division located in the State capital city. Of course, this is not to say that a substantial degree of consultation has not occurred with teachers and other interested groups over major educational and administrative issues or that participatory decision making is not gaining ground in most systems. What is significant, however, is that ultimate responsibility for initiatives in such directions has rested with the head office staff. Partridge comments that efficiency (measured in terms of conformity to externally defined standards by means of external examinations) has been a more important objective than democracy in the sense of local interest and participation, in the shaping of Australian educational policy.

2.21 Tentative moves towards administrative decentralisation have occurred in most States. However, regional directors are normally responsible to the Director-General of Education and local citizens have little formal influence on educational policy. In most instances parents' bodies play a minor advisory role. Where recent efforts to introduce more meaningful participation by parents in school-level policy making have been attempted, teacher resistance has occurred in several systems, especially where any involvement in the selection or appointment of teachers has been suggested.

2.22 The fact that teachers in government secondary schools are members of a State-wide career service leads to significant annual turnover of staff in many schools as teachers are transferred to fill promotions positions. The adverse effects of teacher mobility on the stability of secondary schools and the capacity of teachers to develop effective programs have become more important as teaching has been freed from the worst constraints of prescriptive syllabuses. Unfortunately, those schools most affected by teacher mobility are those in rural communities or in depressed urban areas where the need for stability and a rich school environment is often greatest. Seniority plays a major role in promotion in many systems and attempts to alter this pattern, to achieve a better match of teacher with school or task have provoked opposition from teachers' organisations in some instances.

2.23 State education systems have often been criticised because of the extent to which they are closed to outside influence. Trainee teachers are usually recruited from government and non-government schools within each state and appointments to senior administrative positions from outside the particular State service have been rare. Although the situation has been changing in recent years as a result of improved communications and increased mobility amongst staff of universities and teacher training institutions, much of the conformity in methods and outlook which has characterised secondary education in each State has been a consequence of these policies.

2.24 For many years school inspectors were the officers through which State education departments supervised schools and teaching. However, there have been significant recent changes in the inspector's role in most systems. Increasingly their role is seen as providing leadership, guidance and advice. All systems are examining or have introduced modifications to teacher assessment procedures and

mechanisms for oversighting schools' operations and performance. These developments are very recent and in some systems there continues to be an emphasis on the inspection of schools to ensure the maintenance of standards and on the grading of teachers.

2.25 One of the most frequent criticisms made of secondary education in Australia concerns the lack of freedom in the curriculum. Until recent years syllabuses in the various subject areas available at secondary schools have been prescribed by education departments or statutory examination boards. Those for the upper secondary levels have been heavily influenced by the requirements for entrance to tertiary education. While periodic revisions of curriculum occurred, these have commonly been conducted by central curriculum or syllabus committees. The need for curriculum changes to enable the needs and interests of young people to be met more adequately and to cater for a more diverse secondary school population is now generally acknowledged.

2.26 As in most other areas of secondary education, there have been important developments in curriculum in the very recent past and these are discussed in some detail in a later section of this chapter. Although the rigid, prescriptive curriculum of the past is disappearing, powerful constraints continue to exist at the senior level of secondary schooling. All secondary systems face the task of developing expertise in curriculum planning and course development on a much broader basis than previously. An equally important task is that of changing teacher attitudes and developing their professional skills to enable them to use effectively the freedom which is being increasingly introduced.

The Aims and Objectives of Secondary Education

2.27 A major concern of most government education systems during the last 15-20 years has been to cope with the multiple problems of rapidly increasing enrolments, limited finance, shortage of buildings, facilities and staff. Their efforts have been directed towards quantitative expansion and the solution of short term problems. Most States have conducted inquiries into their own education systems during the past twenty years, but only two have published reports dealing exclusively with secondary education. The Karmel Report, Education in South Australia, 1969-70 (1971) dealt with the whole State education system, but made a number of important recommendations on the objectives of secondary education, its organisation and curriculum. These have had an important influence on recent developments in that State.

2.28 A comprehensive investigation of secondary education was undertaken in NSW in the mid-1950s, the results of which were published in the Report of the Committee Appointed to Survey Secondary Education in NSW, (the Wyndham Report) in 1957. The sweeping reforms in the structure and content of the NSW secondary school which it introduced had major implications for aims and objectives. While clearly acknowledging a special concern for the talented (in Sydney and Newcastle in particular many high schools were still selective at the time the report was published), the Wyndham Report advocated the comprehensive secondary school and basic general secondary education for all students. The Committee stated that the concept of secondary

education it had adopted was:

> ... the education, not of a select minority, whatever the basis of selection, either social or intellectual, but of all adolescents, irrespective of their variety of interests, talents and prospects.

It saw the major problem of the time as being that of meeting the needs of all adolescents without impairment to the potentialities of any. Its emphasis upon a compulsory core of studies encompassing English, mathematics, science and the social sciences offered at a variety of levels to cater for the differing abilities of students has been adopted, with a number of variations, by several other States.

2.29 WA produced two reports in the 1960s dealing with secondary education. The first of these, The Secondary School Curriculum: A Review of Developments in Western Australia 1958-64, was published in 1964 and contained proposals for the first stage of secondary education. It was quite explicit that the principal objective of this stage was to provide a 'broad general education which is designed to help the development of thinking citizens'. This report also contained one of the very few explicit references in official documents to the place vocational studies should occupy in a general secondary curriculum:

> While there is some place for pre-vocational subjects, they should be kept to a minimum and should aim at general educational outcomes rather than specific job training.

By the time this report was published, there would have been a large measure of agreement amongst secondary educators in Australia on the two principles emphasised in it - that secondary education should be general in nature, and that while the curriculum might provide studies designed to give students a vocational orientation, preparation for specific vocations should have little place in the curriculum.

2.30 The later WA report, Secondary Education in Western Australia, was produced in 1969. It re-stressed a belief in general secondary education with a special emphasis on preparing students to become effective participants in society. It also made explicit reference to an important emphasis in secondary schooling in Australia when it asserted that the prime responsibility of the secondary school 'lies in the area of intellectual development'. The report was instructive, too, in laying emphasis upon the desirability of 'universal' secondary education and in the assumptions its writers held about the values and importance of secondary education:

> All students should be encouraged to obtain as much education as possible for the following reasons:
>
> - the functioning of our democratic society depends on a well-educated citizenry
> - there is much more knowledge to be learnt, and the frontiers of knowledge need to be expanded
> - the continued expansion of our technologically based economy is likely to depend upon the availability of skilled manpower

- employment opportunities for individuals can be expected to depend to an ever-increasing extent on their level of education

- participation in creative and artistic activities can develop a cultural background which will enable a person to lead a fuller and more satisfying life.

2.31 The most recent discussion of the aims of secondary education is contained in a document entitled Aims of Secondary Education in NSW, produced by the NSW Education Department in 1973 at the request of the Board of Senior School Studies and the Secondary Schools Board, the statutory bodies responsible for external examinations in that State.

2.32 The document set out the background for re-examining the aims of secondary education. It acknowledged that fundamental aims had been obscured in NSW by concern with administrative and operational details. It noted that the necessary emphasis on these matters 'has undoubtedly contributed to some loss of unifying purpose and to a degree of uncertainty about priorities in the curriculum'. The document discussed changes in the composition of secondary school populations which were having major consequences for both educational aims and curriculum design. It noted that students were staying at school longer, that those in junior years had a wider range of interests and abilities and that they were maturing earlier. Significantly, it acknowledged that the majority of senior students might not be suited by courses designed for entrance to tertiary education.

2.33 In discussing issues associated with the aims of education, the paper set out certain basic assumptions which reflect the current concern in secondary education in Australia with the student's social and personal adjustment. The document maintained that a central aim of education is to guide individual development in the context of society towards perceptive understanding, mature judgment, responsible self direction and moral autonomy, having in mind the various developmental stages through which young people pass.

2.34 The NSW paper canvassed a number of current issues in curriculum planning relating to broad policies for aims and curriculum. These are discussed in more detail below. One of the issues mentioned was the preparation for employment and the provision of further education, continuing education and re-training. A need for closer liaison with educational and employment authorities was expressed and the desirability of students obtaining experience in a variety of work situations to enable them to gain sufficient background to make wise vocational choices was mentioned. This section of the paper also dealt with possibilities of day release and part-time work and part-time schooling as well as opportunities for re-entry into secondary education. While the paper confined itself to suggesting that these matters could appropriately be considered, inter alia, by those involved in planning school programs and did not attempt to explore the practical implications of the suggestions, the inclusion of these matters as issues for consideration reflects the growing awareness amongst some Australian educators of the neglect which preparation for work has experienced and, perhaps, its growing importance in current

economic and social circumstances. It will be noted, however, that it had not been afforded a central place in this discussion of the aims of secondary education, nor was it seen as an issue of highest priority.

2.35 While the NSW statement is the clearest expression of intention regarding devolution of responsibility for determining detailed aims and developing flexible curricula, similar movements exist elsewhere in Australia. Progress is uneven, however, and prescriptive curricula and a failure to see aims other than in terms of preparation for, and performance at, the year 12 external examination remain common in practice as will be discussed. Indeed, it is not yet possible to assess how successful NSW will be in translating its intentions into reality.

2.36 This brief discussion of the aims of secondary education in Australia suggests widespread official endorsement of general education with a major emphasis on preparation for societal roles and personal adjustment. Whether this emphasis has the same importance in practice as academic performance and achievement, even at the junior secondary level, is open to question. Although there is some acknowledgement of the need for more adequate preparation for making intelligent and informed decisions about occupations, there is little evidence of any movement towards the re-examination of aims in the context of vocational preparation. Despite growing criticism of the depressed condition of careers education and vocational counselling in Australian secondary education (see below), there has been little questioning so far within the education systems of the fundamental aims and purposes of secondary education as has occurred in other parts of the world.

Comprehensive Secondary Schooling

2.37 There has been a general movement towards comprehensive secondary education in Australia since the Second World War. In part, this movement has stemmed from rapid enrolment growth, increasing retention rates and consequent difficulties associated with the selection of students.

2.38 NSW introduced a new secondary education system in 1962 based on the recommendations of the Wyndham Report (see above). The first four years' program consists of core studies in specified subjects together with electives from a wide range of offerings after the first year. The first year course is common for all students within the normal ability range. In the three subsequent years courses have been offered at two or three levels. In the senior years there are generally three types of courses in each subject. Most senior students take the majority of their courses at a level acceptable for matriculation purposes.

2.39 In WA approaches along similar lines have been adopted. From the mid-1950s secondary education was provided in multi-lateral co-educational community high schools. A new approach was introduced in 1970 based upon courses differentiated in accordance with student ability. Core subjects were offered at three levels and other subjects were based upon a unit scheme allowing each student to progress individually. As in most other States, the WA authorities retained an external public examination at the end of the senior secondary stage, but some subjects for this examination were available at two levels.

From 1976 a new system will be in operation, final-year students may sit for a tertiary admissions examination which will be used for assessing entry to tertiary institutions. A Certificate of Secondary Education will be awarded to those completing secondary education and is based on the results of the tertiary admissions examination plus a small component based on school assessment. In future, the school assessment proportion will be gradually increased.

2.40 Under the impulse of the recommendations of the SA Karmel Report mentioned above secondary education in SA has undergone a transition during the past six years as different types of secondary school (single-sex technical and academic high schools) organised on a multi-lateral basis have given place to comprehensive co-educational high schools. Generalisations are difficult to make as this process is still taking place and variation between schools is common. Most SA secondary schools seek to provide opportunities over a wide range for study at depths appropriate to the student's maturity, ability and interest. A common feature is the 'hybrid' course which allows students to select from multiple syllabuses in accordance with their needs, abilities and interests. The widest possible range of electives consistent with a school's resources is offered. Many syllabuses in the junior course consist of a core plus options which can either extend the core or provide remedial work to enable students to handle the core. Years 9 and 10 courses develop from the year 8 program and placement in courses is made on the basis of students' and parents' wishes, attainment and record.

2.41 Senior secondary courses are more specialised and aim to equip students for entrance to careers or for post-secondary study. A wide range of subjects and options is available and by selecting appropriate subjects a student may elect to follow a course which is academic, general, technical, commercial or agricultural. In general, subjects fall into two categories - those which may be presented for the external public examination leading to entrance to tertiary institutions and those which are internally assessed and lead to a secondary school certificate.

2.42 Queensland has a non-selective system of secondary education divided into a junior stage of three years and a two year senior stage. A common core of subjects is studied on an exploratory basis in the first year. In subsequent years students enter specific courses having an academic, agricultural, commercial, homecraft or technical bias with both compulsory and elective subjects. Flexibility exists through the provision of a wide range of electives, a variety of levels in basic subjects, and alternative organisations of the set courses. Essentially the Queensland approach remains multi-lateral after year 8, but the measures outlined have reduced many of the constraints imposed by such an approach.

2.43 The first four years of secondary education in Tasmania are comprehensive with courses being available at three levels of difficulty and subjects being offered at different levels. Courses for senior years are offered at two levels and can be taken over one or two years. Tasmania provides senior secondary education in separate institutions known as matriculation colleges. While the initial purpose of this development was to concentrate highly qualified staff, these colleges, whose functions and operations are now much broader than the narrow pursuit of tertiary entrance qualifications, allow

older students to follow patterns of study geared to their individual abilities and interests and provide them with opportunities for social life and personal development not possible in a high school catering for a 12-18 year age group.

2.44 Victoria has not adopted the comprehensive model of secondary schooling to the same extent as other Australian States. It retains a dual system of high schools and technical schools many of the latter being single-sex. Because of the different orientation of the two types of school transfer was difficult in the past but the provision of common core courses in all post-primary schools and the deferment of specialisation until the third year of secondary education have overcome this problem to some extent. Parents are free to choose the type of school their child should attend although the less academically oriented students usually attend technical schools.

2.45 In 1960 a committee established to review education in Victoria acknowledged the disadvantages of this dual system, but saw major practical objections to replacing it with a comprehensive system. Recent studies suggest that strong social forces are at work in both the selection of the type of secondary school and within the school itself. Few members of a technical school student's family have attended university and the majority of such students do not aspire to university education. Technical schools are much more likely to attract children whose parents follow semi-skilled or unskilled occupations.

2.46 Despite the problems posed by its dual system, considerable experimentation in internal organisation has occurred in Victoria's secondary schools. Instead of developing an overall system-wide scheme as has been done in some States, Victorian authorities have delegated responsibility for school programs in both technical and high schools to individual school staffs. Heterogeneous class groupings are common and increasingly core subjects are being studied at varying levels in accordance with students' abilities.

2.47 As this survey indicates there is widespread acceptance of the idea of comprehensive secondary education in Australia. There has been little of the debate which has taken place overseas though the principles of selectivity retain advocates who see comprehensive schools as a major factor in a supposed decline in standards of literacy and numeracy. There has been little investigation in Australia of the ways in which comprehensive schools operate internal selection processes or of the status accorded to particular levels of course (through teacher assignment and resource allocation), nor is there very much public acknowledgement of the extent to which certain levels, often elected in the second year of secondary school, close off later options for students, especially in mathematics and science.

Curriculum in the Secondary School

2.48 The organisation of curriculum development for secondary schools varies considerably from State to State and is currently in a stage of transition as aims and functions of secondary education are subjected to critical appraisal. Generalisations are, therefore,

difficult, but some, at least, of the following features would be found in all States:

- the existence of a branch or division of the head office of the State education department concerned with the general oversight of curriculum planning, development, implementation and evaluation

- a statutory body concerned with administering the terminal secondary examination and prescribing syllabuses for subjects offered for this examination; teachers and officials of education departments are represented on these boards and a variety of formal and informal links with the curriculum branches of education departments exists

- syllabus committees for each of the subjects or areas in the curricula which are broadly representative but which, in some instances, are dominated by representatives of tertiary institutions and central administration personnel

- extensive provision of professional consultative services to assist schools to develop their own curricula and to provide informal monitoring mechanisms

- substantial curriculum support organisations including educational technology units, libraries, teacher development agencies and resource centres

- groups of central administration officers with special training and expertise in curriculum planning, design, development and evaluation, and teams of subject specialists with advisory responsibilities in relation to curriculum policy bodies and syllabus committees

- evolving mechanisms for regionalisation and decentralisation of curriculum development.

2.49 Over the past ten years there has been a general but uneven movement in all States towards giving individual schools responsibility for their own curriculum within a broad framework defined by the various curriculum boards and committees. The gradual change from an external examination to school-based assessment at the end of year 10 has released teachers of lower secondary grades from adherence to rigidly prescribed syllabuses and given them greater freedom to design courses and learning experiences to meet the particular needs of their students. Most States now issue broad guidelines, advisory or discussion papers to assist teachers in formulating their programs for these grades. Even in senior years where work is externally examined at the end of year 12 in all States except Queensland, syllabuses have moved to some extent away from a detailed specification of course content to a statement of aims, objectives and general concepts.

2.50 However, this movement is slow and uneven and an examination of the syllabuses prescribed by statutory examination boards in some States suggests that highly prescriptive syllabuses are still much in favour. Lists of subjects offered for these examinations

also tend to suggest the continuing emphasis on academic subjects and the importance of abstract reasoning at the senior secondary level.

2.51 The point is clearly illustrated in the SA system where two courses are offered at senior levels. Subjects available for the first of these (which terminates in a public examination leading to university matriculation) include English, a variety of history courses, classical studies, foreign languages, economics, several science disciplines, mathematics, art and music. Those for the Secondary School Certificate which is assessed internally include general subjects like social studies, drama, film study, commercial subjects, home economics, technical studies, art-craft. The SA approach is interesting, not only because of the clear distinction it reveals between those studies regarded as appropriate for preparation for tertiary study and those suitable for senior students not aspiring to tertiary studies, but also because it acknowledges the existence of the latter group and seeks to provide a relevant alternative program to meet its needs.

2.52 The changes mentioned above have brought increased responsibilities, demands and problems to teachers, many of whom lack the required skills and competence in curriculum design and ability to devise and evaluate their own programs. While some teachers welcome the opportunity to develop their own courses, others do not have the resources or the time to shoulder this responsibility and want only to select from a number of options. Some progress has been made through provision of teachers resources centres, advisory teachers and in-service training to provide the support structures and assistance needed to enable teachers to take a more dynamic and positive role in curriculum planning. Schools Commission funds for in-service education and the establishment of teachers centres have materially assisted their development. Funds provided under the Commission's Innovations Program have also been used to enable a number of school-based curriculum development projects to be mounted. It is doubtful, however, whether adequate measures have yet been taken to overcome the problems in this area. Fundamental reappraisals and possibly far-reaching changes in prevailing conceptions, practices and institutional structures are needed. As a contribution to this reappraisal the recently established Curriculum Development Centre (CDC) and CERI organised in August 1975 a seminar on 'Curriculum Development: Styles and Structure for Australian Needs'.

2.53 Variations between States and the increasing diversity which has resulted from the growth in devolution of responsibility for curriculum matters make the task of giving an overview of the content of secondary education in Australia extremely difficult. A number of major trends, problems and needs can be identified and these are discussed in the following paragraphs.

2.54 There is growing concern about the general aims of secondary education. The efforts of the authorities in NSW to come to terms with the issues involved have been described earlier. The NSW paper discusses a number of current issues in curriculum planning to provide a basis for policy decisions by the statutory boards, curriculum support agencies and schools. Included in this discussion are:

the need to re-assess modes of learning and motivation for the mastery of basic verbal and numerical skills

- the adequacy of the current range of choice amongst the social sciences
- the need for a reconsideration of the place of citizenship and the franchise in the curriculum
- the place of foreign languages
- the need for a re-examination of levels of study as an approach to the problems of individual differences
- the importance of devoting further attention to questions of preparation for employment, further education and continuing education and retraining
- the total curriculum and its role in guiding personal development
- greater flexibility in time allocations
- reconsideration of relationships among subjects and the possibility of alternative curricula.

2.55 As a further step in having such issues considered a committee of the NSW Secondary Schools Board produced a base paper on the total curriculum for years 7-10 which has been widely distributed in NSW. Following receipt of submissions the Board proposes to advise the Minister of Education on the reorganisation of the first four years of secondary education.

2.56 The Curriculum Development Centre (CDC) and the Tasmanian Department of Education are jointly conducting an examination of the role of the school in society with reference to the first four years of secondary school, the relevance to the needs of the children of the work presented to them in those years and the feasibility, validity and desirability of whole curriculum planning as distinct from the more piecemeal approach adopted in the past. One of the reasons for this system-wide study is the 'current extent of unemployment among and facing school leavers which must lead to a rethinking of the educational process - school organisation, curriculum and teaching methods - particularly at the secondary level where future employment has been given very little prominence'. It is expected that the investigation will produce results of importance for curriculum planning and certification purposes which will be relevant to other States besides Tasmania, as it touches upon the central issues of relevance of school experiences to society and to the world of work.

2.57 There is a growing concern that students be better prepared to move from school not only into further education and the workforce, but into the adult community generally. A greater emphasis on children's learning needs, on widening their view of the world and equipping them with skills which lead to greater competence, initiative, creative effort and independence of mind is seen as being necessary. There is widespread agreement that social education should be concerned with values and that students should be provided with opportunities to discuss controversial issues, face up to value issues and dilemmas, to map out life styles and make decisions and commitments

while developing the kinds of knowledge, skills and attitudes which, it is believed, will enable them to move most readily both in the society of today and tomorrow.

2.58 As a reflection of this concern the new national CDC has decided to undertake its first major project in this field. The Social Education Materials Project (SEMP) aims to produce materials which have sufficient flexibility to be used in a wide range of courses from integrated or general studies programs to existing single-discipline courses in humanities or social studies. In addition, the materials will have sufficient variety to cater for the individual differences of students in secondary schools and a wide range of teaching methods. The topics, each the responsibility of a team centred in a State capital city, are Race and Ethnic Relations, Urbanism, People and Change, Decision-making and Government, Community Study, the Consumer and Society, Social Control and Conflict, and Family Groupings.

2.59 Realisation that Australia is a multi-cultural society has been followed by recognition of the importance of education about minority groups as was indicated in the triennial report of the Schools Commission. Among several projects designed to produce materials which will raise student understanding and awareness of Aboriginal culture, the CDC is supporting a project by Queensland University Press to produce a series of Aboriginal Studies Kits. Education about other cultures in neighbouring countries is promoted through the activities of the Asian Studies Co-ordinating Committee of the Commonwealth Department of Education. The Disadvantaged Schools Program of the Schools Commission endeavours to involve local communities, particularly ethnic or migrant groups, in school activities; indeed some level of community or parent involvement is a feature of a number of projects under this program.

2.60 The general concern with values is also shown in the high level of curriculum development activity in several States in the areas of religious education, health education and environmental education. Health programs, which frequently consisted of topics such as sex, smoking and drugs, are being reorganised in NSW, ACT and WA as integrated programs concerning the whole personal and social development of students and making greater use of small group work and discussion techniques. Major reports on religious education in State schools have been prepared in all States except NSW over the past three years. A new syllabus in religious education for lower secondary schools has been introduced in Tasmania and the SA Department of Education has a curriculum development team preparing and trialling materials for a new secondary course in religious education.

2.61 In spite of these initiatives, it is doubtful whether the basic issues of value education are being widely faced and whether schools are equipping students to think through the value questions, personal and social, which they will meet as members of the workforce and the community. There is evidence, however, that such issues are now receiving serious consideration in a number of States.

2.62 The education of girls has come to the forefront of educational discussions, particularly with respect to the ways in which both the planned and the hidden curriculum influence the formation of

their self-concepts and their vocational aspirations. A proposal from the Schools Commission Steering Committee for an Inquiry into Social Change and the Education of Women led to two conferences on sexism in school materials organised jointly by CDC and the National Advisory Committee for International Women's Year in August 1975. A materials kit developed from the first conference has been published as Re-educating a Generation: Avoiding Sex Bias and the findings from the second conference are being prepared for publication. Several States have recently established committees to report on sexism in education.

2.63 As the reference to the NSW paper on the aims of secondary education indicates, there is some concern at official levels about the general level of literacy and numeracy of school leavers. Numerous letters in the press and articles from employers, university lecturers, technical college teachers and parents complain about the inability of school leavers to spell, write or express themselves adequately. The Australian Council for Educational Standards maintains a strong attack on current standards in these basic skills. Blame is attributed to teachers, parents, television, new teaching methods and the emphasis on cultural activities and social development in the school program. While there is little clear cut evidence of an overall decline in literacy, the increase in the proportion of the school population entering tertiary education and para-professional occupations and the decrease in unskilled work have led to demands for higher educational standards. Numeracy and literacy are often seen as basically the responsibility of the primary school but there are important implications for the curriculum of secondary schools if these demands on the vocational competence of students are to be met.

2.64 With diversification of curriculum, and increased teacher activity in the development of new programs, teaching methods and material there is increasing demand for information, support services and resources. These are being provided in a number of ways, by State departments of education, the Commonwealth Department of Education, Schools Commission projects and funds, Teachers' Resources Centres and professional associations. Over recent years there has been widespread acceptance of the importance of in-service education as an essential prerequisite of curriculum development and educational change. All State departments of education have in-service branches and recently the Commonwealth Government has provided funds for in-service training on a substantial scale through programs administered by the Schools Commission. Recognising the need to direct support for teacher initiatives at the regional and local level, the WA Department of Education plans to institute a committee on school based curriculum development and the Victorian Department of Education has initiated an inquiry into curriculum services to examine the structure and function of existing curriculum services and consider alternative support structures and arrangements.

2.65 New methods of curriculum evaluation are required to assess the many innovative programs being implemented both at the system or regional level and at the individual teacher or school level. Traditional methods using extensive testing of students are not necessarily the most appropriate techniques and teachers need in-service education to give them the skills required to monitor their

programs using both non-test data and objective assessment procedures.

2.66 One crucial aspect particularly for early leavers (if the evidence of the studies of Connell et al. and Poole and Simpkins referred to below is accepted) which appears to have received virtually no serious consideration to date is the provision of real vocational preparation options within the secondary curriculum. The emphasis on the comprehensive secondary school and upon general education which has been noted precludes the offering of courses with a vocational bias even though many students would welcome such options. Although there is some evidence of a growing awareness by educational administrators of the necessity for secondary school programs to be more concerned with preparing young people for entry to the work force and for what will be expected of them when they enter it, few effective strategies have yet been devised to deal with this transition. In almost all respects, secondary education systems continue to operate with only marginal reference to the circumstances, social and employment requirements which school leavers will face.

Assessment of Students

2.67 Until quite recently most Australian students who completed the full secondary course were obliged to take two public external examinations, the first at about the end of the junior stage and the second at the end of the final year. These examinations were usually administered by statutory boards, some of which also had powers of prescribing syllabuses. The composition of these bodies varied from State to State, but in most cases the influence of the universities was particularly strong, especially in relation to the final-year examination.

2.68 The importance attached to these public examinations is perhaps best illustrated in the Wyndham Report whose authors concluded that the School Certificate, following the first four years of secondary school, should be awarded on the basis of an external examination. The decision to have this examination was justified on the grounds that public opinion was not ready for the abolition of public examinations and that it was the only means by which standards could be safeguarded.

2.69 Following the phasing out of this examination, assessment of students at the end of the junior secondary stage is now carried out internally in each State. The concern with uniformity of standards is still evident in the moderation of these internal assessments which takes place in several States usually by supervision to ensure comparability of gradings among schools or by the administration of comparability tests to guide schools in their assessments.

2.70 As Diagram 2.1 indicates, public external examinations at the end of secondary schooling have been retained in all States but Queensland. Their retention has been based on the continuing widespread acceptance of the traditional function of the senior secondary program to prepare the most academically able students for entrance to tertiary education. Criticisms by overseas educationists of the dominance of the final examination at the senior secondary level have elicited only a limited response in Australia. Teachers have adopted a generally conservative approach to the question until very

recently. A further factor of significance has been the growing importance of the certificate awarded as a result of these examinations to the growing numbers of students completing the full high school course and to employers in an increasing variety of fields. Increasingly, the completion of the full secondary course and success in the final examination are being used for purposes which bear little relationship to eligibility for tertiary entrance.

2.71 There are some signs, however, that traditional attitudes to the final external examination are changing. The abolition of the year 10 examination has led to experiments with other forms of assessment and a growing confidence amongst teachers in their effectiveness. Devolution of a measure of responsibility for curriculum to individual schools and the growth of interdisciplinary studies have also led to a more critical attitude to public examinations. It has also been suggested that many young teachers who attended university during the 1960s are less inclined to accept the traditional arguments for examinations and more accustomed to dissent than their predecessors.

2.72 The most notable development in the re-assessment of the place of the final examination has occurred in Queensland, not as a direct result of teacher agitation, however, but flowing from the work of a committee of inquiry headed by Dr W C Radford, the Director of the Australian Council for Educational Research, and established by the State education authorities. Both the Senior Certificate and the Junior Certificate public examinations in Queensland have been abolished as have the statutory boards which previously administered these examinations. Under the new arrangements a single Board of Secondary School Studies issues certificates based upon internal school assessments of students' performance. To ensure comparability of standards between schools an extensive moderation program is conducted. All tertiary institutions in the State accept the Board's Senior Certificate which records students' achievement in each semester unit of each subject studied, though each prescribes the standard required to guarantee admission. A similar approach is being adopted in the new ACT system from 1977.

2.73 The Radford Report saw a number of advantages as likely to flow from the replacement of the examination by school assessments. Chief amongst these were the reduction in anxiety and concern experienced by students and parents; greater opportunity to take account of individual differences; and the possibility of taking into account aspects of students' work not amenable to testing by examination. However, the early experience of the new system has recently been reviewed somewhat critically by W J Campbell et al., and debate on the system is continuing (see paragraph 2.77).

2.74 It should not be concluded from these developments, however, that widespread support yet exists in Australia for the abolition of public examinations. Events in Victoria tend to suggest that public attitudes continue to resemble those described in the Wyndham Report, almost twenty years ago. The Victorian Secondary Teachers' Association has agitated for several years for the abolition of the Higher School Certificate Examination At the Association's 1975 Annual General Meeting, resolutions declaring total opposition to educational prerequisites for tertiary entry and selection procedures involving externally prescribed curricula were passed. The meeting

also resolved that teachers would refuse to co-operate if such curricula remained in force after 1976.

2.75 When the Association proposed similar, though less radical action to this in 1974, there was widespread public support for the retention of the existing system. Indeed, many teachers reacted strongly to the Association's proposals and there is abundant evidence that traditional attitudes to the senior curriculum and to formal assessment through examination as a major element in controlling and disciplining students remain widespread in Victoria.

2.76 In summary, while there is a growing movement for reform of the public examination system for final-year secondary students and for associated curriculum freedom, there is also strong resistance to it from both teachers and the public at large.

2.77 The public reaction in Victoria referred to above and growing disquiet in the ACT suggest that the progressive educationists who have sponsored the attack upon the examination system have moved in advance of public opinion, and indeed, beyond a position acceptable to many teachers. It must be of considerable concern to these advocates that a recently completed report makes a number of serious criticisms of the operation of the Queensland scheme. Of particular concern are the claims that while methods have changed from external to internal assessment, neither the spirit nor the function of assessment has approached the ideals enunciated by the Radford Report, that the status quo in respect of the purposes of assessment and senior secondary education has been maintained, and that fearfulness, anxiety, unhappiness and depression amongst students appear to have increased as a result of the scheme's introduction.

2.78 It has been suggested that in the current circumstances of youth unemployment, heightened competition will occur in secondary schools and there will be a renewed emphasis upon publicly accepted qualifications. This, together with reservations about internal assessment, may lead to a reinforcement of the place of the final-year examination.

Equality of Opportunity in Secondary Education

2.79 There has been much recent discussion of equality of opportunity in secondary education in Australia. As commitment to the principle of universal secondary schooling has grown and as retention rates for the final, post-compulsory years of secondary school have increased, many of the assumptions which have traditonally been held regarding equality of opportunity have been challenged. Similarly, measures taken to ensure equality of opportunity have been subject to critical scrutiny.

2.80 In developing policies and programs to counter educational inequality, Australian authorities have concentrated on ensuring equal access to schools of approximately equal standards and levels of provision and on the possibility of extending schooling for all those of sufficient ability to the final secondary year. (Details of the various programs of financial assistance for secondary students are outlined in Appendix A of the Schools Commission's 1976-78 report).

2.81 Numerous studies have shown that such approaches have had little effect in removing inequality. These have been described in the reports of the Interim Committee for the Australian Schools Commission and the Commission itself. The Interim Committee quoted Australian studies which showed that a disproportionate number of students who were the children of professional and managerial fathers gained entrance to tertiary education institutions, that children of manual workers were substantially under-represented among tertiary students and, indeed, survival at school was strongly related to social class membership. Other studies have shown that children from lower socio-economic groups have lower expectations and more limited self image than socially more favoured groups.

2.82 In its Report for the Triennium 1976-78, the Schools Commission emphasised the importance of relative social and economic deprivation as factors contributing to educational inequality. It also drew attention to the special problems of particular groups of young people. It listed such factors as isolation, lack of access to cultural facilities, the range and level of local employment and the educational levels and incomes of families as creating educational disadvantage for children in country areas. The report also described the limits of provisions which can be made at secondary level even where a viable number of students can be assembled.

2.83 The report noted the recent marked increase in retention rates for girls and suggested that their schooling will be of equal length to that of boys in the near future. It referred, however, to the under-representation of girls in tertiary education, especially in the high prestige professional fields of medicine, law, engineering and architecture, and to the predilection of girls to have lower expectations than boys and to underrate their own abilities. The Commission saw existing curriculum options, careers literature and traditional social values and expectations communicated to girls by schools as imposing important limits on opportunities available to them.

2.84 The Schools Commission regarded migrant children as a further group with special educational disadvantages. Noting that more than one in ten Australian school children have at least one parent whose native language is not English, the Commission emphasised the conflicting pressures of family, peers and school on these young people. Despite a number of recent major programs in migrant education (see below), and evidence of high aspirations among migrants from non-English speaking origins the Schools Commission saw a necessity for action on a much broader scale than is the case at present, if the conflicting pressures on migrant children are to be alleviated to enable them to have equal access to the benefits of Australian society.

2.85 People identifying themselves as Aboriginals comprise only about one per cent of the Australian population, but because of their special place in Australian society and the long history of neglect to which they have been subject, they are especially important as a disadvantaged group. The Schools Commission quoted the National Population Inquiry Report of 1975 as observing that 'in every conceivable comparison, the Aborigines ... stand in stark contrast to the general Australian society, and also to other "ethnic" groups ... They have the highest growth rate, the highest death rate, the worst

health and housing and legal status of any identifiable section of the Australian population'. The Schools Commission reported that as recently as 1971, only one percent of all Aboriginals had completed secondary education.

2.86 Despite concentrated attention in the recent past (see below) the education of Aboriginals still exhibits important shortcomings. Of particular importance are the tensions and frustration experienced by young Aboriginals because of the differences between their indigenous cultural traditions and those which characterise most Australian schooling and, of equal importance, teaching.

2.87 The establishment of the Interim Committee and subsequently the Schools Commission in the last four years has allowed the first major attack at national level to be made on the problems of educational inequality and disadvantage in Australian schools. The approach adopted can best be summarised in the following words from the Interim Committee's Report:

> If developed ability is affected by environmental influences, the provision of more equal educational opportunity requires that schools should not concentrate on merely treating all children alike and selecting the best. It involves action which will attempt, both within the schools and beyond them to supplement the opportunities open to children whose general conditions of life are least conducive to the development of scholastic ability. More equal outcomes from schooling require unequal treatment of children.

2.88 Both the Interim Committee and the Schools Commission take the view that programs of financial assistance to students or of income supplementation to needy families do not bring about equal educational outcomes for different social groups, though both bodies have acknowledged that recent national policies of student assistance based on income tests rather than academic performance are likely to assist longer attendance by those who currently leave early because of factors associated with social background. Both suggest that greater diversity in schooling and more radical approaches and a greater concentration on the needs of particular groups might overcome present inequities and allow schools to exercise a more positive influence than appears now to be the case. They see support for schools to enable alternative approaches to be introduced as having very high priority.

2.89 One thousand and twenty-three primary and secondary schools were classified as 'disadvantaged' for the purposes of special capital and recurrent financial assistance under the Schools Commission's Disadvantaged Schools Program. These schools provide for 370,000 students, almost 13 per cent of the total primary and secondary school population. Because this program commenced only in 1974, no evaluation of its effectiveness in overcoming the deficiencies in provisions which have contributed to educational inequality has yet been possible. However, the Schools Commission reported encouraging signs that the funds which have been provided appear to be achieving the program's aims. Both teacher morale and the environment of schools catering for the most disadvantaged students showed evidence of improvement.

2.90 In addition to this major program for disadvantaged schools, there has been a number of recent initiatives aimed at reducing the educational inequalities experienced by the particular groups described above.

2.91 In 1973 the Australian Government introduced a scheme of assistance for isolated children which includes a basic allowance of $350 a year for each child living away from home. Children of low income families may receive a maximum of $1,150. Students taking correspondence lessons receive an allowance of $200 and may, depending upon family income, qualify for an additional $150. Almost 18,500 students were aided by this scheme in 1975.

2.92 As a consequence of the decision that new initiatives in education should be deferred in 1976, the comprehensive program aimed at improving education in country areas which was proposed by the Schools Commission has not been introduced. This program included provision for detailed studies of disadvantaged country regions, improvements to existing correspondence school and school of the air facilities, residential facilities and teacher housing. The Commission will continue to investigate country education problems during 1976.

2.93 As mentioned above in paragraph 2.62 the education of girls has been receiving particular consideration. While it has made no specific financial provisions designed to reduce the disadvantages faced by girls, the Schools Commission has committed itself to supporting action aimed at removing distinctions in curriculum options restricting occupational and career choices for girls (and boys) and at raising the aspirations of girls likely to have the shortest schooling. It has also indicated willingness to fund projects designed to widen options for girls. Late in 1975, the Commission published Girls, Schools and Society, a major report of a committee on social change and the education of women established by the Commission.

2.94 Since 1971 the Commonwealth Government has provided funds for the Child Migrant Education Program (CMEP) to meet the costs involved in providing instruction in English for migrant children. Funds cover the costs of teachers' salaries, the production of materials, equipment, emergency classrooms, initial intensive training and the professional development of teachers. The Schools Commission considers that action is needed on a larger scale than is provided by CMEP, which has concentrated on 'withdrawal' classes for English instruction. In recommending funds for child migrant education for 1976, the Commission has stressed the importance of transforming the perspectives of schools to reflect a multi-cultural emphasis as well as a more flexible use of specialist teachers.

2.95 There has been a significant increase in direct expenditure on all aspects of Aboriginal education by the Commonwealth Government from $8,061,000 in 1971-72 to $32,614,000 in 1974-75. Annual expenditure on the Aboriginal Secondary Grants Scheme alone has grown from $2,536,000 to $7,716,000. The Schools Commission has noted that there is little evidence to suggest that additional basic funding is necessary for schools catering for Aboriginals. It has supported a variety of measures, some entailing funding from its special programs, to enable Aboriginals to have a more effective voice in educational

policy issues and to provide for more effective liaison between schools providing for Aboriginals and homes. The Commission has also recommended that a national review of action in health, nutrition and welfare be undertaken to ensure that Aboriginal students can benefit fully from their educational programs.

Student Attitudes and Alternative Forms of Secondary Schooling

Student Attitudes

2.96 Until very recently, relatively little research had been undertaken in Australia into student attitudes to secondary schooling. Two recent studies suggest that some general conclusions can be drawn. Most students feel dissatisfaction with their secondary school experiences, the degree ranging from almost total alienation to lukewarm toleration. The majority of students find that school bears little relation to society at large or the world of work and that it caters most inadequately in preparing them for work. As might be expected, the studies mentioned suggest that the school has little impact on students' values and attitudes.

2.97 The most substantial of these studies was conducted by a research team at the University of Sydney headed by Professor W F Connell. This team employed questionnaire survey techniques to analyse a wide variety of attitudes, aspirations and relationships of a sample of 8,000 Sydney school students and 1,100 teenagers who had left school. Its findings were published in 1975 in a book entitled 12 to 20: Studies in City Youth. It is not possible to report upon the many conclusions arrived at by this team in this chapter, but reference must be made to four of its fundings which are thought to have particular importance for possible school reform.

2.98 The researchers concluded that secondary education (in NSW) is academically oriented and suits the minority of young people whose parents belong to higher level occupational groups. For the majority of students, this emphasis while not rejected, is not adopted with enthusiasm. They accept a school program of only marginal interest with resignation. While acknowledging the social value attached to successful performance at the narrowly intellectual range of tasks upon which school programmes are based (particularly in the senior years), the majority of students feel school experience to be one-sided and unbalanced, something to be tolerated rather than regarded with pleasure.

2.99 Apart from the minority of students oriented towards entry to the professions, school seems to have little discernible relationship with either the work performed by most members of society or to the actual organisation and operation of society. For this majority, much of schooling is irrelevant, if not meaningless.

2.100 While a clear division between school and work exists, there appears to be no correspondence between this and major changes in cognitive, emotional, social, moral or interest development which seem to occur along a continuum extending over the whole twelve to twenty years age range. Because of the narrow focus of secondary education and its organisation, schools rarely cater for students' all-round development, individual talents or personal fulfilment.

2.101 On the evidence of this study, schools do little to capitalise upon the sociable nature of teenagers or their growing need for personal autonomy. They give young people few opportunities for effective group activity and little responsibility for planning their own work or activities. Few schools have provided an emotional climate of sufficient warmth to encourage teenagers to learn the skills and attitudes of co-operative work and enjoyment that they are obviously ready for. This is exacerbated by the apparent belief of many teenagers that their teachers are brusque and uncivil.

2.102 A progress report was published earlier this year on a study known as The 15-18 Year Old Project being undertaken by members of the School of Education at La Trobe University in Melbourne under the direction of Dr Millicent E Poole. This project involved some 1,600 students drawn from a representative sample of thirty-two Melbourne secondary schools. Analysis of data collected in this study is not yet complete, but Dr Poole and her associates have published some general comments on certain areas which raise implications for educational policy:

- There is, and probably will continue to be, a large discrepancy between aspirations and actual attainments in secondary school students; those who do not fulfil their aspirations will come from working class families and minority groups; girls will drop out of school more because of their home backgrounds than ability or motivation; covert, unintentional comparisons with boys in co-educational schools may affect girls' personalities and performances

- Twenty per cent of students had strong negative attitudes to their schools; half the early school leavers fell into this category

- Almost all students sought a change in teachers' roles and opportunities for active participation in the educational process

- The overwhelming majority of students wanted a much closer relationship between school and work; they wanted more subjects related to future jobs and much more vocational guidance and careers information

- The students sampled expressed a demand for schools to become more relevant to their existing personal needs and their future occupational needs. The researchers concluded that schools '... need to be pluralistic to satisfy their customers'

- Early school leavers lacked feelings of competence and self-esteem and thought they did not have educational skills needed for their personal and occupational future; these students were from working class homes; schooling was largely irrelevant to them

- Dr Poole and her associates raise the question of whether the desirability of mass secondary education until eighteen should not be re-examined. They suggest that in a tight job economy experience may be taken as a more valuable commodity than credentials.

2.103 Many of the problems touched upon in these studies are acknowledged by educational administrators. Indeed, the restructuring of secondary education which has taken place in the ACT was, in large measure, a response to such problems. The statement of aims for secondary education in NSW described earlier in this paper is another attempt to come to terms with them. Yet despite such endeavours, and despite the various movements towards more flexible curricula and recognition of levels of interest and abilities 'within and between students', there is some evidence of a sense of alienation and a belief in the irrelevance of secondary schooling among many students. Poole suggests that educational administrators' reluctance to acknowledge the need for closer relationships between school, society and the world of work, and their continued emphasis on general education (as has been outlined) may be major contributory factors.

Alternative Forms of Secondary Schooling

2.104 While the gradual changes within the conventional secondary school framework described in this chapter have been taking place, more radical reforms have been introduced, both by education authorities and private groups and organisations.

2.105 The social climate in Australia during the 1960s favoured the spread of the ideas of the 'progressive' education movement. A number of private 'progressive' schools have been established during the last decade with their emphasis upon the individual child's personal development. These and other alternative schools accept that the response of each individual to his learning experiences is more valuable than the emphasis on the transfer of desirable skills and attitudes which typifies conventional schooling.

2.106 Open-space schooling was perhaps the first of the alternatives to conventional secondary schooling to gain substantial ground in Australia. Although originally a movement in primary education, open-space planning has been embraced in SA, ACT and Tasmania in secondary education. Closely connected with the changed physical environments of open-space schools are notions of team teaching, staff differentiation, flexible grouping of students, individualisation of study and progress and flexible scheduling.

2.107 The community school movement has been prominent in Victoria where a number of such schools have been established as annexes to conventional secondary schools. These schools oppose the use of external constraints on students: they make more extensive use of community resources and seek to involve the community in their decisions to a greater extent than do conventional schools. These schools usually consist of a small mixed age group of secondary students and are as open to movement into and out of the community as possible. Students are closely involved in planning their own programs and a high premium is placed on individual student initiative. No distinctions are made between formal and informal learning and a major

problem exists in working out a balance between structured and random experience for each child. Other problems include a lack of enthusiasm for participation in community experiences and barriers between school and home.

2.108 Alternatives to conventional secondary schools have been criticised for their emphasis on expressive goals and the students' personal well-being and adjustment. They have been criticised for favouring the already advantaged middle classes. Another major issue is whether progressive educators have the right to impose the ideals of the alternative movement upon parents whose choice of schools is limited and who may prefer more conventional approaches. This has been a particularly contentious issue in relation to open-space schools which have usually been established by administrative fiat. The outright rejection of the desirability of evaluating student performance and resistance to conventional accountability mechanisms amongst community schools are other lively issues in Australia.

2.109 Many Australian educationists believe that alternative schools of all types can stimulate efforts to define the school's role and function and that this may be of particular importance when structural change in education is being seriously discussed. They consider that providing lines of responsibility and authority are clear, a wider introduction of alternative approaches could be beneficial to Australian education.

Vocational Guidance, Counselling and Careers Education in Secondary Schools

Personnel and agencies

2.110 Vocational guidance and counselling for secondary students are provided in a variety of ways. Most States have guidance officers attached to individual high schools or located in regional or district offices. Most schools are visited on a regular weekly basis but smaller schools in the more remote geographic regions sometimes receive only an annual visit. Guidance personnel carry out psychological testing and broadly based job counselling, especially for potential school leavers. Some systems co-opt interested and qualified teachers to assist in this program. Such teachers receive in-service training and their work is supervised and co-ordinated by qualified psychologists.

2.111 In NSW vocational guidance is primarily the responsibility of the Vocational Guidance Bureau (a division of the NSW Department of Labour and Industry), though close liaison is maintained with school counsellors and local officers of the Commonwealth Department of Employment and Industrial Relations (see below). The services provided by the Bureau consist of the administration of verbal, non-verbal and mechanical tests to all year 9 students in the State, interviews (where students accept the invitation to follow up the test) and further testing. The initial interview is designed to establish broad vocational objectives, appropriate schooling options and further training requirements.

2.112 Most States have recently recognised the need for specialist careers teachers but as yet the provision of these on a

full-time basis is limited. Interested practising teachers are given an allocation of time to carry out these duties. NSW practice illustrates this development. Teachers appointed as careers advisers are usually relieved of teaching duties for about six hours a week to interview students and undertake other duties related to careers education. In 1975, 503 teachers (the equivalent of 83 full time teachers) were appointed as careers advisers. Short in-service training courses are conducted each year for careers advisers. Seventy eight per cent of these teachers had previously been careers advisers, 51 per cent were graduates and 33 per cent had taken courses in psychology.

2.113 Personnel designated as psychologists or school counsellors exist in all State systems. They are usually required to service both secondary and primary schools in particular regions and they are primarily concerned with case work and the administration of group and individual intelligence and attainment tests. Their work with secondary students includes elements of vocational counselling as career decisions are often related to educational, emotional and social problems.

2.114 The extent of specialist guidance and counselling services generally and the adequacy of the provisons they have been able to make may be gauged from the fact that in 1974 there was the equivalent of some 830 full-time specialists in the categories of guidance officers, counsellor and psychologist in all Australian government systems. Government secondary school enrolments in 1974 were a little over 800,000. The situation in non-government schools was more unfavourable.

2.115 The Commonwealth Department of Employment and Industrial Relations whose activities have been described in a number of documents submitted to OECD provides a wide range of vocational counselling, guidance and careers education services throughout Australia. It administers the Commonwealth Employment Service, conducts careers reference centres and a vocational counselling service and publishes a range of occupational information material.

2.116 The Commonwealth Employment Service provides a job information, counselling and placement service for school leavers and other young people. In all States but NSW it is the principal agency for vocational information and guidance. It undertakes an extensive investigation of job vacancies each year and subsequently refers intending school leavers seeking placement to the vacancies so identified. Youth employment officers from the CES maintain close liaison with government and non-government schools and assist in a wide variety of careers activities.

2.117 The first career reference centre began operating in 1971 and they now exist in each State capital and the large regional centres Wollongong, Newcastle and Geelong. These centres provide information on professional and semi-professional careers through written and audio-visual materials.

2.118 The Department of Employment and Industrial Relations produces a range of information material for distribution to secondary

schools and individuals. One hundred and thirty job leaflets currently exist which give brief job descriptions, information about working conditions, entry requirements, training and the personal qualities required for a particular job.

2.119 The Department's vocational psychologists offer a vocational counselling service to clients with problems of vocational choice, vocational orientation and adjustment. Units are located in all capital cities and in a number of regional centres. Teams of psychologists occasionally visit country towns. These psychologists supplement the work of school guidance and counselling staff and employment officers, concentrating on cases requiring special counselling skills and individual assessment techniques. The Department's vocational psychologists are currently engaged in a major program to produce career orientation or career education material to be used in school curricula or in group counselling to stimulate vocational planning.

2.120 A number of private employment agencies exists in all States. Most of these offer placement services supported by counselling and they concentrate on professional, semi-professional and commercial fields, thus limiting the service available to the majority of school leavers. In some States there are private vocational psychologists or consultants who offer interviews, counselling, testing and vocational guidance reports and, in some cases, a limited placement service. Non-government schools often make use of the services of such organisations. Fees for both schools and individuals are high.

2.121 Professional bodies like the Institute of Architects, Chartered Accountants and Private Secretaries, and Law Societies undertake limited career guidance activities, usually by providing speakers for careers evenings. Such bodies also produce a limited amount of written material introducing occupations to young people. A few professional bodies organise special activities such as lectures or work experience. Most charge registration fees for participation.

2.122 Trade unions occasionally provide representatives at careers evenings who concentrate on occupations involving apprenticeship. The degree of union involvement varies markedly. There are signs of growing interest in participation by trade unions and the recent establishment of a training college for union officials is expected to produce greater awareness and expertise amongst union officials in this field.

2.123 Most associations representing business or industrial groups offer some form of information and limited counselling service, which is oriented towards recruitment in their particular section of industry. The quality and extent of this varies considerably. Such organisations include the Automobile Chambers of Commerce in each State, Master Builders' Association of Australia, Retail Traders' Association, Printing and Allied Trades' Federation, Fire, Accident Underwriters' Association etc. With the increasing attention being focused on work experience, school careers and advisers are increasingly involving local employers in work experience programs as well as giving talks in the schools about jobs and work environment. However, it appears that only a limited number of large employer groups and the armed services make it known that they are prepared to make visits and talk to students about occupations.

2.124 The Australian Broadcasting Commission has a careers liaison officer in each State who organises career seminars on careers in the ABC, and answers queries from the public and from schools. The career oriented programs which are disseminated by and through the ABC are many and varied. The quality of ABC careers material is good but accessibility to it is 'limited for technical reasons.' There appears to be considerable scope for ABC material to be more effectively utilised in career education activities if these problems of accessibility can be overcome.

2.125 Several commercial television and radio programs aimed at young people occasionally focus on careers issues and present relevant information. Most major Australian newspapers have career supplements at strategic times during the year. Parent, teacher, community and business journals give space to careers material on a fairly regular basis. Several private publishing firms produce careers guides and booklets on employment opportunities which are either distributed free to secondary schools or are available at nominal prices.

Programs

2.126 Little work has been undertaken in Australia in developing comprehensive guidance syllabuses. In NSW a careers and guidance syllabus was introduced as part of the secondary curriculum when the Wyndham Scheme was adopted in 1962. This syllabus had four main strands - educational, vocational, social and personal. In 1973, 231 secondary schools included guidance lessons in their timetable, inclusion being a matter for the discretion of each principal. In 1970 work was begun in NSW on a new careers and guidance syllabus which has been prepared in sections separately adapted for varying age groups. The syllabus offers updated courses on personal and social adjustment, educational adjustment and vocational adjustment and has tended to supersede, or be incorporated with, the earlier approach. Similar, though less comprehensive, attempts to introduce careers education into the secondary school curriculum have occurred in several other States.

2.127 NSW is also developing a program specifically to meet the needs of girls. A career orientation program drawing upon recent British and American research has recently been trialled in NSW and Victoria while the Department of Employment and Industrial relations in introducing a career planning program. It is notable that the first of these programs was tested with students from years 11 and 12 in Victoria and that no consideration has apparently been given to its applicability for students in the first two years of secondary school. The Department of Employment's program is aimed at year 10 students.

2.128 Several States have introduced work-experience programs for secondary students in an attempt to give them first-hand experience or observations of a variety of occupations and as a means of introducing them to the nature and demands of working life. The objectives of such schemes and the way in which they are organised vary and, in most instances, reflect the particular objectives of the individual school concerned. The initiative for the introduction of such programs has rested with individual schools and no State has yet developed a system-wide approach to work-experience. One consequence of this has been their introduction in some schools with, it seems, insufficient

attention to the many legal and industrial issues involved which are discussed below.

2.129 Work experience programs usually involve students over the age of 15 years in one of the following typical activities:

- work for one or more periods of a fortnight or so during which they may or may not be paid
- work for frequent short periods e.g. one day per fortnight
- observation of work being performed for periods of up to a fortnight.

A working group established by the State and Commonwealth Ministers for Labour in 1974 reported that there were several major issues associated with work experience programs which required close consideration. These included personal gain to participating individuals, school-employer relationships and a number of legal and industrial issues the resolution of which was regarded as being of major importance. Victoria, where the incidence of such programs is highest, and Queensland have subsequently enacted legislation to provide for work experience and other States are considering similar action.

2.130 One interesting initiative has been joint action by a number of State agencies to arrange vocational guidance camps for country students at a suitable metropolitan location. The aim of these programs, which cater for students from years 10, 11 and 12, is to enable country students to gain first hand knowledge of careers and vocations through visits, lectures, discussions etc.

2.131 This brief survey indicates that a number of informal means exist to enable secondary students to obtain information and advice regarding careers. The adequacy of such mechanisms and the degree to which students are able to obtain genuine assistance will be discussed in the following section.

Evaluation of Current Provisions

2.132 It will be obvious from preceding sections of this chapter dealing with the aims of secondary education in Australia and the attitudes of students, parents and employers to secondary schooling that such claims as might be made about the adequacy of vocational counselling and careers education and the provision of associated services serve only to conceal a most inadequate reality. The provision of personnel described above in paragraphs 2.112 and 2.114 indicates the extent to which vocational guidance and counselling have until very recently, been regarded as a marginal activity in most systems. A closer investigation of the major provisions confirms this unsatisfactory situation.

2.133 Where the rare attempts to deal comprehensively with the provision of vocational guidance and careers education have been made, a major problem has been that the activities of the staff concerned (careers adviser, guidance officer, counsellor) have not been considered central to the mainstream of the school's activities and the absence of a career structure within the school system for those

wishing to specialise as careers advisers. The fact that the NSW Department of Education was able to make only token provisions in respect to staffing when it introduced the syllabus mentioned above, coupled with the provison for it to be implemented at the individual principal's discretion, reflects the past failure of education systems to develop or promote programs of pastoral care and vocational guidance in any effective way. Most critics of such programs as do exist in Australia regard them as marginal to the secondary school's main activities, unable to attract the resources, personnel or priority in scheduling which might make them more effective.

2.134 The majority of programs currently offered are aimed at students in year 10 (usually the final year of the compulsory stage) or later. The neglect of students in earlier years of secondary schooling is of particular concern when it is recalled that they are obliged to choose electives from as early as year 8 and in some States are obliged to commit themselves to a particular curriculum strand at an early stage with minimal guidance as to the vocational implications of their choices.

2.135 The NSW guidance syllabus mentioned previously acknowledged this problem and provided for a program covering the first four years of secondary school. Many critics believe this scheme failed as a result of the shortage of competent, committed staff to implement it and to the fact that the syllabus was not obligatory.

2.136 Other resources needed to enable effective vocational guidance and careers advice to be provided are also inadequate. In general, little provision is made to facilitate student access to career literature either in specialised or general libraries (though there have been isolated recent developments often assisted by funds from the Schools Commission's Innovations Program). The literature on individual careers available is dated, limited in range and displays evidence of conventional sex stereotyping in regard to occupations. Only limited audio-visual material is available to schools and access to much of the most valuable material of this kind is restricted, as has been noted.

2.137 One of the main problems facing the out-of-school agencies involved in this field is that they make very little provision for those actually in transition from school to work. The services which offer information tend to concentrate on the professional and semi-professional occupations. The vocational counsellors of the Department of Employment and Industrial Relations are increasingly coping with various vocational problems in the over 18 year old age group, (i.e. those who have left school) rather than the 17 year old and under age group which has been the greater part of their caseload in the past. The career planning program - which is currently being initiated by the Department is a positive attempt at encouraging career planning before the individual is confronted with the need to make a decision. However, it will be some time before the impact and effectiveness of this program can be evaluated. The service provided by the NSW Vocational Guidance Bureau is rendered less effective because of inadequate mechanisms for ensuring follow up.

2.138 A basic problem facing career resource centres in assisting

the majority of school leavers is that of presenting lower level jobs as being viable occupational goals. There is considerable scope for the career reference centres, for example, to include more information about trades and apprenticeships.

2.139 Co-ordination of careers guidance services throughout Australia is limited and there is a need for more consultation and joint planning between the agencies involved to ensure that the most efficient use is made of scarce resources. There is also a pressing need for a comprehensive evaluation of the services currently provided by the various organisations.

2.140 The best available summary of the present situation of vocational guidance and careers education in Australia is provided by the recent Australian Council of Trade Unions (ACTU) survey of young workers for the Commission of Inquiry into Poverty. It showed that:

> amongst juveniles leaving school to enter the workforce, a significant number appeared to have received very little career guidance or none at all. Thirty-one per cent of the sample had no careers literature in their school library or were unaware of it; 35 per cent had never discussed careers with their teachers; 38 per cent felt they were entering the workforce without an adequate idea of the career opportunities open to them, or of their own potential in the job market.

2.141 The survey concluded that:

> the most useful vocational guidance came from the teachers at the respondent's school and the least successful from the 'professional' vocational guidance officers who visited the school. While not wishing to discredit the latter, it seems clear that vocational guidance can best be given by a person who has watched a child's development, has his confidence, and can give him advice in a continuing capacity.

NON-GOVERNMENT SCHOOLS

Introduction

2.142 No general consideration of secondary education in Australia would be complete without a discussion of the non-government schools. The non-government sector of secondary education comprises two groups of schools - Catholic schools and other schools, many of which are affiliated with Protestant churches and which follow fairly closely the traditions of British great public schools. The term 'independent' is commonly used in Australia to describe these schools. A complicating factor is that some of the leading Catholic secondary schools are also based on this model and serve similar social groups as the Protestant schools.

2.143 The importance of the non-government sector may be seen in the fact that in 1974, 24.5 per cent of all secondary students in Australia attended non-government schools. For the final two years of secondary schooling this proportion was greater than 44 per cent. As Table 2.3 indicates, retention rates in the last three years of

secondary schooling are higher in non-government schools than in government schools and, in some instances, are increasing at a greater rate. Of course, these high retention rates may partly be explained by students transferring to non-government schools from government schools for the last two years.

Non-Catholic Non-Government Schools

2.144 Non-Catholic non-government secondary schools have a long history in Australia. Indeed, it was not until the second decade of this century that secondary education systems were established by State governments and even later before these presented a viable alternative to the independent schools. As mentioned, these schools are usually affiliated with churches and are normally single-sex though economic pressures have brought about some recent development of co-educational schools formed by the combination of particular girls and boys schools. The non-Catholic schools have traditionally catered for the middle or upper middle class. They are controlled by councils which usually contain members nominated by a church authority. The council normally appoints the headmaster or headmistress who, in turn, usually appoints teaching staff. Control by a council gives independent schools much greater flexibility than government schools operating within the bureaucratic framework of State education departments. The ability to raise funds through charging fees, the higher degree of discretion over their use and the continuity of staffing enjoyed by most independent schools place them at a further advantage over government schools.

2.145 Many independent schools continue to pursue the traditions of service, co-operation and selfless allegiance that characterised the British schools on which they were modelled, though some critics have regarded this approach as being narrowly focused. A central aim continues to be the provision of a religiously-based education and the all-round development of the individual through a wide range of extra-curricular activities (with a heavy emphasis on sport) and comprehensive programs of pastoral care. Many independent schools provide boarding facilities and this has been of great value to children from remote areas who would otherwise have had only limited access to secondary education. It should be noted, however, that only those country students whose parents have had the capacity to pay boarding and tuition fees have been able to benefit. There are, of course, schemes of State and Commonwealth allowances which assist those on lower incomes.

2.146 Undoubtedly, the high fees at non-Catholic independent schools (in 1974 on average $750 per annum, exclusive of boarding fees) prevent many children from lower-income families from enrolling. Similarly, the fact that preference has been given in the past to the children of ex-pupils and those of the religious denomination with which the schools are identified, has excluded some wishing to enrol. Increasingly, however, the introduction of merit admissions policies and schemes of financial assistance by these schools is providing enrolment opportunities for a much wider cross-section of the community.

Catholic Schools

2.147 The earliest Catholic secondary schools in Australia were

established slightly later than their non-Catholic counterparts and had similar aims and outlooks. In the late nineteenth century as religious orders became active in the cities and larger country towns with the growth of the Catholic community, a network of Catholic secondary schools sprang up which increasingly became concerned with providing secondary education for Catholic boys unable to attend the earlier established, more traditional Catholic schools. Girls convent schools, initially providing a curriculum which concentrated on cultural subjects, date from the same period. Many of these convent schools catered for boarders.

2.148 As universal secondary education has become the norm in Australia and as school leaving ages have risen, responsibility for establishing new secondary schools to cater for children of lower class Catholic parents has fallen increasingly upon parishes and dioceses. Accompanying this has been the development of regional, State and national administration of Catholic education, and a much closer collaboration between the Catholic orders and the 'systemic' schools (i.e. those administered by the Catholic education 'systems').

2.149 Since the Second World War there has been a marked increase in Catholic school enrolments at all levels. This has been caused by the large number of Catholic migrants, increased birthrate and rising school retention rates. Between 1946 and 1960 there was an increase of almost 100 per cent in enrolments in Catholic schools. Since 1960 there has been a substantial slowing down and during the last decade there was a decrease in the proportion of total enrolments in Catholic secondary schools from 17.7 per cent to total secondary enrolments in 1965 to 16.5 per cent in 1972 (even though absolute numbers have risen), while the proportion of Catholic children of school age has steadily increased. A decrease in primary enrolments occurred in absolute terms in recent years. Clearly, Catholic schools have been unable to meet the demands placed on them; the above figures suggest that highest priority has been given to the secondary sector.

2.150 These enrolment pressures have had a number of important consequences for Catholic secondary education. Increasingly lay teachers have had to be employed and by 1974 they made up almost two-thirds of the teaching force in Catholic schools. As Diagram A.5 indicates both lay and religious teachers in Catholic schools are significantly less well qualified than their counterparts in government or non-government non-Catholic schools. The Interim Committee of the Schools Commission noted that, despite recent increases in recurrent financial assistance, in 1972 Catholic secondary schools used only about 70 per cent of the resources per pupil used in an average government school, indicating the inadequacy of facilities available. The Committee also noted that in 1972, Catholic secondary schools had the largest class sizes of all schools; student-teacher ratios are significantly higher than in government or non-Catholic secondary schools.

2.151 These factors have posed serious educational problems in many Catholic secondary schools. Teachers have frequently been obliged or constrained to concentrate upon the intensive preparation of senior secondary students for tertiary entrance examination to the detriment of other aspects of the educational program. While this approach has

often ensured that students from Catholic schools are successful in securing places in tertiary institutions, some studies suggest that the narrowly based secondary education experienced by many Catholic students prepared them inadequately for tertiary studies and that they did not perform as well at these studies as students from government or non-Catholic non-government schools. At the other end of the scale, Catholic secondary schools have had great difficulty in catering for the non-academic student or for those with special difficulties (particularly children of Catholic European migrant parents who have both language problems and difficulties arising from socio-economic or cultural factors).

2.152 The pressures experienced by Catholic schools and the evidence of the lower level of resources available to them have led to considerable discussion about the future of Catholic education. Some critics have argued, for example, that as about 40 per cent of Catholic children enrol in non-Catholic schools (1970 figures) and as the growing need to employ lay teachers have posed major questions about the continued capacity to provide education of a specifically Catholic character, the attempt to cater for all levels of schooling should give place to a priority for primary education. The response to such proposals has been a reaffirmation of the commitment to a complete education system. Undoubtedly, the recent more liberal provisions of financial assistance for non-government schools (see below) contributed to this decision. Catholic authorities have acknowledged that some ordering of priorities in particular areas will be necessary and they have increasingly concentrated on the rationalisation of secondary education which has been characterised by unnecessary duplication of scarce resources and personnel and inadequate planning.

Government Assistance to Non-Government Schools

2.153 Government financial assistance for non-government schools has been a major, and often bitterly disputed, question in Australian education since government education systems replaced church controlled schooling in the second half of the nineteenth century. Despite its formal proscription, assistance for non-government schools has a long history initially taking the form of scholarship assistance by State governments for non-government school students.

2.154 The last twenty years have witnessed a significant growth in the variety and extent of both State and Commonwealth assistance as rising costs and decreasing numbers of religious teachers have affected school budgets. State assistance includes subsidies for interest payments on borrowings for school buildings, scholarships and bursaries, textbook allowances, library stock, materials and supplies, and conveyance allowances. Between 1964 and 1969, all States introduced per capita grant schemes to assist non-government schools to meet their mushrooming recurrent costs. In 1973-74 State government assistance to non-government schools totalled $59.9m or an average of $97 per head. In 1976 recurrent grants by the individual States vary from about 8 per cent to 22 per cent of the national average running cost per pupil in government schools.

2.155 Since 1964-65 the Commonwealth government has provided substantial financial assistance for non-government schools primarily

through programs of capital grants for secondary science and library facilities and since 1970, recurrent grants. In 1972-73, the last year before the Interim Committee's programs were introduced, Commonwealth government assistance for non-government schools in the States totalled almost $48m.

2.156 With the advent of the Interim Committee and subsequently the Schools Commission, Commonwealth support for non-government schools in the States has increased markedly while state contributions have also been rising. Actual expenditure by the Commonwealth increased by nearly 47 per cent in 1973-74 and by a further 85 per cent in 1974-75. A further increase of 13 per cent is provided for 1975-76. Both the Interim Committee and the Commission have recommended programs which provide for differential levels of support for non-government schools depending upon their level of resource use per pupil. Both stress the importance of funds being made available on the basis of need. Because most of the Catholic parochial primary and secondary schools had been operating at lower levels of resource use, they have received substantially increased grants while many of the older established non-Catholic and order-controlled Catholic secondary schools have received less than under the previous uniform per capita grants system. A number of the latter group of schools were in 1972 already operating at a level of resource use per pupil above the targets then established for achievement by the end of the decade (these targets have since been deferred).

Limits upon Non-Government Schools

2.157 Naturally, such an increase in assistance for non-government schools has involved the development of appropriate mechanisms of accountability which include financial accounting, provision of statistical returns, the maintenance of certain acceptable standards and, in the case of those grants paid as a lump sum to school systems, a general oversight of the distribution of funds.

2.158 In other respects, too, the freedom of non-government schools has some limitations on it, though the degree varies from State to State. In some States it is still theoretically possible for non-government schools to operate without inspection by the education departments, in others, formal registration is obligatory. Financial assistance from State governments is only available to 'approved' schools, which in fact means that almost all non-government schools must open themselves to some form of inspection, at least initially. One of the most important constraints upon non-government schools is in the requirement to follow the curriculum and syllabi prescribed for the final public examination.

Conclusion

2.159 As mentioned, non-government schools have consistently held their students better than government schools and this remains true despite recent increases in retention ratios in the latter. During the 1950s non-government schools contained more than half of all final-year students. They have, therefore, made a significant contribution to community and professional leadership in Australia through the importance of their role in preparing students for university study.

Non-government schools have also had an important impact on Australian secondary education generally by providing models for the government secondary systems which developed early in the twentieth century though some critics argue that this influence has been unnecessarily conservative. Finally, non-government schools have provided some diversity and choice in those States where the government system has been characterised by a substantial degree of uniformity.

DIAGRAM 2.1

GRADES IN GOVERNMENT SECONDARY SCHOOLS
(Average age of students in years and months in each grade at 1 August 1974)

Year	NSW	VIC	QLD	SA	WA	TAS	NT	ACT
	Higher School Certificate(2)	Higher School Certificate(2)	Senior Certificate(3)	Matriculation(2)	Tertiary admissions Examination (2) Leaving Certificate (2)	Higher School Certificate (1) (2)	Matriculation(2)	Higher School Certificate(2)
12	17.10	17.08	17.03	17.04	17.02	17.08	17.07	17.10
11	16.09	16.08	16.02	16.03	16.03	16.09	16.02	16.10
	School Certificate(3)		Junior Certificate(3)		Achievement Certificate (3)	School Certificate (3)		
10	15.11	15.08	15.03	15.03	15.03	15.08	15.05	15.10
9	14.11	14.08	14.03	14.03	14.03	14.09	14.03	14.10
8	14.00	13.08	13.03	13.03	13.03	13.09	13.03	13.10
7	13.00	12.08				12.10		12.10

Notes:
(1) In Tasmania most pupils study for the Higher School Certificate over a two-year period in years 11 and 12.
(2) External examination.
(3) Based on school assessment.

Source: Commonwealth Department of Education

DIAGRAM 2.2

ORGANISATION CHART OF THE SECONDARY EDUCATION DIVISION-SOUTH AUSTRALIA 1973

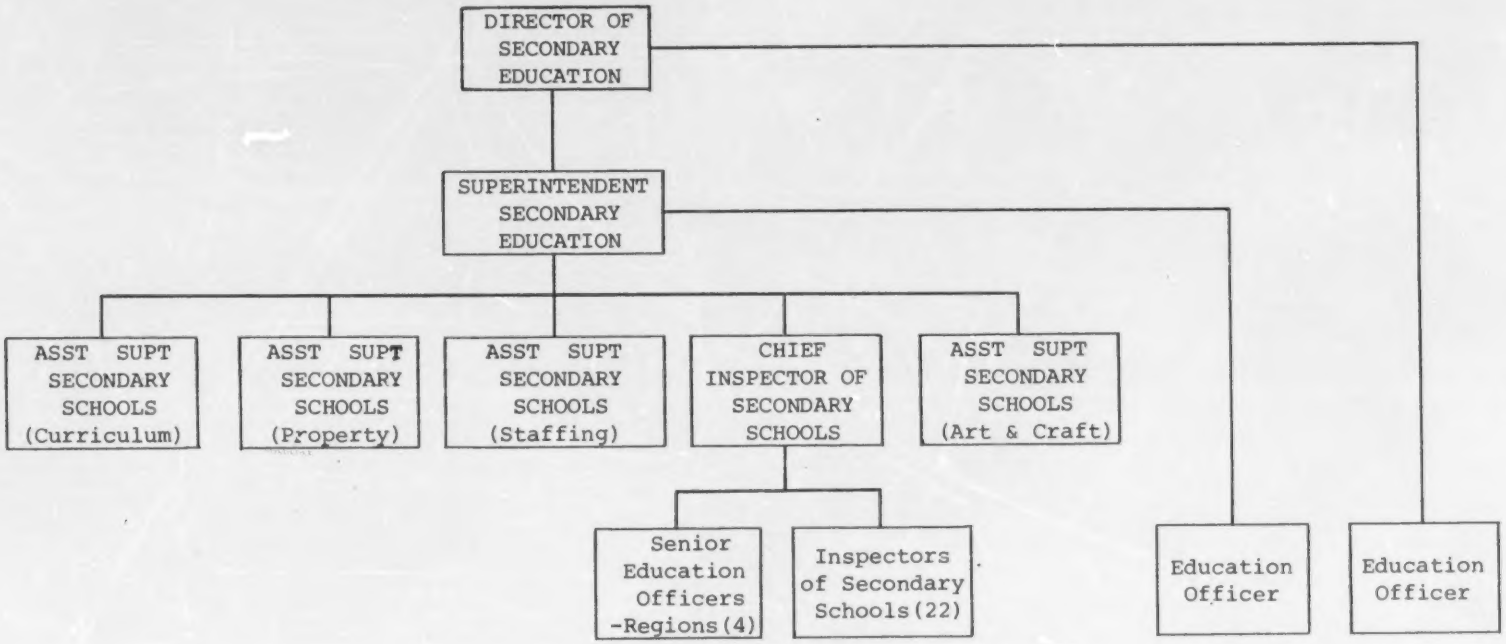
DIRECTOR OF SECONDARY EDUCATION
SUPERINTENDENT SECONDARY EDUCATION
ASST SUPT SECONDARY SCHOOLS (Curriculum)
ASST SUPT SECONDARY SCHOOLS (Property)
ASST SUPT SECONDARY SCHOOLS (Staffing)
CHIEF INSPECTOR OF SECONDARY SCHOOLS
ASST SUPT SECONDARY SCHOOLS (Art & Craft)
Senior Education Officers -Regions (4)
Inspectors of Secondary Schools (22)
Education Officer
Education Officer

TABLE 2.1

ENROLMENTS AT GOVERNMENT AND NON-GOVERNMENT SECONDARY SCHOOLS FOR THE FINAL THREE YEARS 1962, 1968, 1975(p) ALL STATES AND TERRITORIES

		Year 10		Year 11		Year 12	
		Govt	Non-Govt	Govt	Non-Govt	Govt	Non-Govt
NSW(a)	1962	39,948	15,441	15,168	7,882	9,543	6,197
	1968	37,259	14,927	15,702	7,115	13,242	6,078
	1975	51,741	17,081	23,774	9,174	19,476	8,475
VIC	1962	24,256	9,850	9,173	6,802	3,866	3,970
	1968	25,001	12,778	22,159	10,547	8,567	6,465
	1975	41,814	15,073	28,988	13,048	13,188	9,742
QLD	1962	15,201	6,776	3,609	2,868	2,067	2,054
	1968	20,097	7,650	5,732	4,099	4,622	3,570
	1975	26,180	8,768	10,491	5,565	7,133	4,453
SA	1962	11,070	2,842	4,515	1,652	1,030	674
	1968	16,053	3,189	9,226	2,456	3,038	1,493
	1975	18,588	3,668	14,265	3,423	6,241	2,429
WA	1962	7,484	2,727	1,930	1,420	1,185	946
	1968	11,734	3,693	3,399	2,024	2,362	1,625
	1975	15,117	4,139	7.766	3,029	4,539	2,334
TAS(a)	1962	5,357	1,137	2,266	905	529	391
	1968	3,547	1,287	1,043	538	708	353
	1975	5,427	1,210	2,007	661	1,637	449
NT	1962	126	8	37	..	..	..
	1968	349	27	114	..	45	..
	1975	760	94	487	65	164	46
ACT	1962	713	369	370	243	255	169
	1968	1,114	542	658	335	532	279
	1975	2,181	890	1,380	598	1,151	559
AUST	1962	104,155	39,150	37,068	21,772	18,485	14,401
	1968	125,154	44,093	58,033	27,114	33,116	19,863
	1975	161,808	50,923	89,158	35,563	53,529	28,487

.. nil p - preliminary

(a) In 1962 both NSW and Tasmania had a 5-year secondary system.

Source: Australian Bureau of Statistics, Ref. No. 13.5

TABLE 2.2

AGES OF STUDENTS ENROLLED IN VICTORIAN SECONDARY SCHOOLS: 1962-74

Type of School	Age	1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
Government	14	34,516	34,640	39,114	41,802	42,749	44,181	44,403	46,339	47,691	48,359	49,790	50,667	50,259
	15	29,352	27,923	28,537	31,974	33,614	34,799	36,932	37,445	39,150	40,504	41,561	41,675	42,576
	16	12,680	17,014	17,423	18,218	20,647	22,179	23,809	25,973	26,461	27,752	29,141	28,993	28,908
	17	4,535	5,595	8,138	8,337	8,781	10,119	11,218	12,491	13,268	13,303	13,918	14,244	13,661
	18+	1,218	1,462	1,988	2,742	2,901	2,952	3,537	4,183	4,279	3,996	4,051	3,892	3,549
Non-Government	14	12,186	12,379	13,191	13,680	13,765	14,343	14,300	14,636	14,882	15,095	15,557	15,699	16,291
	15	10,613	10,122	10,541	11,388	11,760	12,148	12,968	12,942	13,424	13,773	14,147	14,790	14,834
	16	6,663	8,134	7,965	8,247	8,973	9,385	9,987	10,472	10,827	11,103	11,630	12,089	12,770
	17	3,324	3,818	4,653	4,764	4,952	5,500	5,963	6,407	6,689	7,007	7,363	7,776	8,344
	18+	971	1,018	1,227	1,483	1,668	1,612	1,797	2,051	1,795	1,614	2,130	2,016	2,149

Source: Australian Bureau of Statistics, Ref. No. 13.5

TABLE 2.3

RETENTION RATIOS(a) IN THE LAST THREE YEARS OF SECONDARY SCHOOL
1965-1975p ALL STATES AND TERRITORIES

		Year 10		Year 11		Year 12	
		Govt	Non-Govt	Govt	Non-Govt	Govt	Non-Govt
NSW	1965	44.0	61.6	n.a.	n.a.	n.a.	n.a.
	1967	52.8	70.3	23.9	36.1	20.2	27.8
	1971	71.7	85.9	33.7	44.6	28.9	39.2
	1975	77.5	89.7	36.0	48.8	30.1	44.7
VIC (b)	1965	68.1	75.6	n.a.	n.a.	n.a.	n.a.
	1967	72.5	80.4	45.9	65.4	18.1	39.6
	1971	79.7	86.6	56.1	74.8	24.8	51.3
	1975	81.5	92.3	56.4	81.0	26.4	62.6
QLD	1965	69.2	98.6	18.1	52.4	n.a.	n.a.
	1967	82.4	91.9	22.4	51.6	18.9	48.9
	1971	85.1	94.2	27.9	54.0	23.9	50.2
	1975	92.1	94.3	37.6	61.1	26.9	50.5
SA	1965	82.0	92.6	39.4	68.1	n.a.	n.a.
	1967	81.4	93.8	44.0	69.5	14.7	38.6
	1971	84.1	95.1	62.8	91.2	24.8	59.4
	1975	85.4	100.1	67.5	100.6	30.3	70.2
WA	1965	72.3	86.3	22.5	47.7	n.a.	n.a.
	1967	86.8	90.9	25.0	51.0	17.7	43.4
	1971	87.9	92.8	32.9	56.0	22.6	44.1
	1975	90.4	92.3	47.6	70.3	28.5	55.7
TAS	1965	45.2	78.3	n.a.	n.a.	n.a.	n.a.
	1967	48.4	79.2	14.0	36.6	9.2	20.8
	1971	67.6	87.1	24.8	48.1	17.4	30.3
	1975	76.8	95.8	28.6	48.8	23.5	33.4
NT	1965	73.8	43.5	26.0	..	n.a.	n.a.
	1967	78.0	32.7	35.1	..	11.4	..
	1971	79.9	72.4	58.5	11.8	21.6	..
	1975	66.4	68.1	49.4	45.4	20.3	..
ACT	1965	70.0	84.1	n.a.	n.a.	n.a.	n.a.
	1967	77.4	88.0	48.6	57.2	45.9	55.5
	1971	93.3	88.2	71.9	63.6	56.3	58.0
	1975	98.4	95.6	66.7	67.3	63.1	68.6
AUST	1965	60.7	75.7	n.a.	n.a.	n.a.	n.a.
	1967	68.3	80.2	31.6	50.8	18.4	36.3
	1971	78.5	88.7	42.1	59.2	25.9	46.1
	1975	82.7	92.2	46.2	65.7	28.6	53.4

n.a. - not available .. nil p - preliminary

(a) The retention ratio is the ratio of enrolments in a particular school year to enrolments in the first secondary school year when the cohort of that school year commenced secondary schooling.

(b) In the statistics for Victoria students in year 12 in Government technical schools are not included in the calculation of retention ratios.

Source: Commonwealth Department of Education

TABLE 2.4

SCHOOLS BY SIZE OF PRIMARY AND SECONDARY ENROLMENTS
1974

Secondary / Primary	Nil	1 to 20	21 to 35	36 to 100	101 to 200	201 to 300	301 to 400	401 to 600	601 to 800	801 to 1,000	1,001 to 2,000	over 2,000	Total
GOVERNMENT SCHOOLS													
Nil	..	4	..	7	30	60	84	174	223	220	235	1	1,038
1 to 20	942	51	1	4	..	..	..	..	..	..	..	..	1,038
21 to 35	715	22	1	1	..	..	..	..	..	..	..	..	739
36 to 100	1,206	57	11	25	..	..	..	..	..	..	..	..	1,299
101 to 200	542	18	18	94	41	3	..	..	..	..	..	..	716
201 to 300	433	2	4	18	54	10	..	1	..	..	..	..	522
301 to 400	443	..	1	3	17	6	1	..	..	..	..	..	471
401 to 600	807	..	..	4	9	2	1	..	..	..	..	..	823
601 to 800	442	..	..	..	1	..	..	..	1	..	..	..	444
801 to 1,000	177	..	..	..	..	..	..	..	..	..	..	..	177
1,001 to 2,000	66	..	..	..	..	..	..	..	..	..	..	..	66
over 2,000	2	..	..	..	..	..	..	..	..	..	..	..	2
Total	*5,775*	*154*	*36*	*156*	*152*	*81*	*86*	*175*	*224*	*220*	*235*	*1*	*7,295*
NON-GOVERNMENT SCHOOLS													
Nil	..	3	9	17	69	54	56	76	35	15	4	..	338
1 to 20	69	3	1	2	6	3	..	..	..	..	..	..	84
21 to 35	48	8	1	5	3	4	4	1	..	..	..	..	74
36 to 100	322	9	3	10	13	12	11	8	3	..	1	..	392
101 to 200	359	6	6	20	25	26	22	34	11	3	2	..	514
201 to 300	299	1	4	6	13	8	16	24	19	6	1	..	397
301 to 400	156	..	..	2	7	3	..	6	5	6	3	..	188
401 to 600	120	..	..	1	..	..	1	5	1	2	..	..	130
601 to 800	34	..	..	..	..	..	..	..	..	..	..	..	34
801 to 1,000	4	..	..	..	..	..	..	..	..	..	1	..	5
1,001 to 2,000	1	..	..	..	..	..	..	..	..	..	..	..	1
Total	*1,412*	*30*	*24*	*63*	*136*	*110*	*110*	*154*	*74*	*32*	*12*	*...*	*2,157*
ALL SCHOOLS													
Nil	..	7	9	24	99	114	140	250	258	235	239	1	1,376
1 to 20	1,011	54	2	6	6	3	..	..	..	..	..	..	1,082
21 to 35	763	30	2	6	3	4	4	1	..	..	..	..	813
36 to 100	1,528	66	14	35	13	12	11	8	3	..	1	..	1,691
101 to 200	901	24	24	114	66	29	22	34	11	3	2	..	1,230
201 to 300	732	3	8	24	67	18	16	25	19	6	1	..	919
301 to 400	599	..	1	5	24	9	1	6	5	6	3	..	659
401 to 600	927	..	..	5	9	2	2	5	1	2	..	..	953
601 to 800	476	..	..	..	1	..	..	..	1	..	..	..	478
801 to 1,000	181	..	..	..	..	..	..	..	..	..	1	..	182
1,001 to 2,000	67	..	..	..	..	..	..	..	..	..	..	..	67
over 2,000	2	..	..	..	..	..	..	..	..	..	..	..	2
Total	**7,187**	**184**	**60**	**219**	**288**	**191**	**196**	**329**	**298**	**252**	**247**	**1**	**9,452**

Source: Australian Bureau of Statistics, Ref No. 13.5

TABLE 2.5

GROSS NUMBERS OF TEACHERS IN GOVERNMENT, CATHOLIC AND OTHER NON-GOVERNMENT SECONDARY SCHOOLS 1970, 1972, 1974

Type of School	1970	1972	1974
Government	42,537	47,811	54,093
Catholic	6,877	7,605	8,790
Other non-government	5,254	5,519	5,753
All Schools	54,668	60,935	68,636

Note: The numbers include all teaching staff and principals and head teachers, whether permanent or temporary. The figures also include some teachers involved wholly in advisory, administrative and other non-teaching duties. Part-time teachers are included in full-time equivalent terms.

Source: Schools Commission, Report for the Triennium 1976-1978

TABLE 2.6

GROSS STUDENT-TEACHER RATIOS IN SECONDARY SCHOOLS 1970, 1972, 1974

Type of School	1970	1972	1974
Government	16.9	16.2	14.8
Catholic	23.5	22.2	20.3
Other non-government	14.4	14.2	14.3
All schools	17.5	16.7	15.5

Note: The figures in Table 2.6 have been calculated by dividing the total number of students by the gross number of teachers.

Source: Schools Commission, Report for the Triennium 1976-1978

CHAPTER 3 TRANSITION TO WORK

3.1 This chapter is concerned with the nature of job opportunities facing prospective school leavers, their compatibility with the aspirations and education of young people; and provisions for those already in the workforce to improve the transition process. The data available on which to base these discussions are very limited and as a result some of the interpretation and comment in this chapter is speculative.

3.2 The chapter firstly describes the composition of school leavers, the types of employment they enter, the incidence of unemployment among teenagers and the influence of demographic and educational trends on the future prospects for young people. Then consideration is given to the expectations of school leavers in relation to their early job experiences followed by a discussion of the attitudes of employers and unions with particular emphasis on proposals to improve job satisfaction. Finally attention is given to action being undertaken by governments to promote the employment of young people.

SCHOOL LEAVERS

3.3 It is estimated that about 230,000 students left school in 1975, about 75 per cent in the November-December period after having completed the school year. The general trend in the past decade has been for students to stay longer at school (as shown in Table 2.3 above). Table 3.1 shows school leavers for the period 1974-75 by grade in August 1974. About 35 per cent of students were in year 12, 15 per cent in year 11, about 35 per cent in year 10 (for which a certificate is awarded in most states) and about 15 per cent in year 9 or lower grades.

3.4 On average, students are about 15 years old at the beginning of year 10 (as indicated by Diagram 2.1). Information on the precise age of school leavers has not been compiled for Australia as a whole. However, Table 3.2 shows that 45 per cent of leavers in 1974-75 were 15 or less at August 1974.

3.5 Girls still tend to leave school earlier than boys, although the differences are now quite small. Children in non-metropolitan areas tend to leave school earlier than their counterparts in the city as shown in Table 3.3. Also, children from families high on the socio-economic scale and pupils at non-government schools tend to stay at school longer than those families low on the socio-economic scale and in government schools, as discussed in Chapter 2.

3.6 About three quarters of school leavers enter the labour force directly from school, although as discussed below not all are successful in obtaining employment. About 23 per cent of school leavers proceed to full-time further study and about 20 per cent commence part-time study. Tables 3.4 and 3.5 provide a more detailed break down. About 17 per cent of leavers, about half the enrolment in year 12, proceed to full time tertiary education. It is clear that only a relatively small proportion of leavers from year 11 or below

proceed to full-time study as only about 6 per cent of all school leavers enter other forms of full-time study. The large majority of part-time students take courses in sub-tertiary institutions, particularly institutions for technical and further education.

3.7 The proportion of girls continuing directly to further study is a little lower than for boys. It appears girls are more likely to take short courses such as secretarial courses, and less likely to take up study after a period in the labour force. By May 1975 about 60 per cent of 1970 male school leavers had undertaken some form of post-school study compared to a little over 40 per cent of girls (see Australian Bureau of Statistics, Ref. No. 6.53).

3.8 Of those leavers directly entering the labour force about two thirds have left school from year 10 or lower years. A substantial proportion of these, perhaps half, would not have completed year 10. The particular difficulties of such early leavers are considered further below.

Employment

3.9 Only limited data are available on the employment entered by school leavers. However, a sample survey in May 1975 by the Australian Bureau of Statistics resulting in the bulletin School Leavers, 1970 to 1974: Their Employment Status and Education Experience in May 1975 substantially increases the information available. Previously, information had been compiled for leavers from schools combined with leavers from universities and other educational institutions.

3.10 Table 3.6 shows the occupation groups in 1975 of leavers from schools in 1970 and 1974. Compared with the entire male labour force (see Table A.12) male school leavers are more than proportionately represented in the category 'tradesmen, production process workers, labourers'. Unfortunately, it is not possible to single out those specifically entering trade occupations. However, other information on new apprenticeships suggests that about a quarter to a third of boys entering the labour force directly from school take up apprenticeships.

3.11 Females of all ages in the labour force are over-represented in occupations such as clerical and sales (nearly 50 per cent of females) compared to males (15 per cent) and under-represented in the categories tradeswomen, production process workers, labourers, farmers, fishermen, timbergetters. Female school leavers are even more over-represented in clerical and sales occupations. (Incidentally, only 6 per cent of apprentices are females.) Table 3.6 shows that two-thirds of the 1974 leavers in employment in May 1975 were in clerical or sales occupations. A movement over time of young females from semi-skilled to clerical occupations may occur as was indicated in a survey by the Australian Council of Trade Unions (ACTU). Such movement is compatible with the smaller proportions of those who left school in 1973 and earlier years, compared with leavers in 1974, who were in sales occupations in 1975, revealed by the Bureau of Statistics survey.

3.12 The data on leavers from school for 1970 in Table 3.6 needs to be interpreted carefully since they include some who proceeded from

school to full-time study but are in employment at May 1975. The proportion of leavers in professional, technical etc. occupations, 17 per cent for 1970 compared to only 6.5 per cent for 1974, reflects this.

3.13 The distribution by industry of school leavers in employment is shown in Table 3.7. Females leaving school in 1974 are over-represented in wholesale and retail trade compared with the entire female labour force (see Table A.11). However, for the 1970 leavers, including those who would have completed tertiary courses, a different picture emerges. Community services, including the education and health industries, involve 32 per cent of employed females who left school in 1970, well above the figure for females of all ages in the labour force, and the figure for wholesale and retail trade, at about 20 per cent, is well below the average for the female labour force. Male leavers in 1974 are also over-represented in wholesale and retail trade compared with the entire male labour force.

3.14 A study by Radford and Wilkes of school leavers in 1971-72 is useful for information by State, for non-metropolitan areas and for selected occupation groups. Interstate differences were not notable. An above average proportion of leavers from metropolitan schools undertook full-time further study as might be expected from the differences in grade of leaving shown in Table 3.3. Non-metropolitan leavers had proportionately more entrants to nursing, sales and shop assistants, and farming occupations.

3.15 The Radford and Wilkes study confirms that a very small proportion of girls enter trade training but that relatively high numbers take courses at business colleges or enter nursing and primary teacher training.

3.16 The study by Connell et al, 12 to 20 on youth in Sydney on the whole confirms the picture from other sources. It appears that girls in Sydney may be even more concentrated in clerical jobs than indicated for Australia as a whole in Table 3.6.

Unemployment

3.17 At the end of April 1976 over 25,000 school leavers (persons under 21 who at the time of registering for employment had left school in the previous six months) were registered as unemployed. There was a seasonal peak of 60,000 unemployed school leavers in January 1976. The number unemployed can be roughly compared with the number of school leavers, about 175,000, who entered the labour force over the previous 12 months. A similar picture of unemployment among school leavers emerges from the quarterly survey conducted by the Australian Bureau of Statistics in February 1976 which showed 37,000 persons aged 15-19 to be looking for their first job, 16,000 males and 21,000 females.

3.18 The incidence of unemployment among youth is also indicated by Table A.15 below which shows unemployment by age, sex and place of birth, at August 1975. The rate for 15-19 year olds is more than three times that for all persons, (or more than four times that for persons

20 and over). Persons aged 15-19 represent about a ninth of the labour force but over a third of the total unemployed of nearly 275,000 in February 1976. The actual rate of unemployment for persons 15-19 in February 1976 was 13.3 per cent, a slight fall from a peak in November 1975. Females and persons born overseas experience higher rates of unemployment in the 15-19 age group and in other age groups.

3.19 The rate of unemployment among teenagers has been increasing relative to that for all persons (as shown in Diagram A.3 below). The unemployment rate for all persons averaged under 2 per cent in the decade to 1974. It increased sharply late in 1974 and has remained at a relatively high level since then of over four per cent as measured in the surveys by the Bureau of Statistics. It is also possible that part of the increased educational participation of teenagers represents hidden unemployment. In 1975 there was public discussion of teenagers returning to school when they were unable to find work. The pressure to obtain higher school levels or certificates, discussed below, is a related phenomenon.

Disadvantaged Groups

3.20 Precise data on unemployment among particularly disadvantaged school leavers are not available, but a recent estimate by the Australian Council of Social Services suggests that about 30 per cent of the whole Aboriginal labour force of 35,000 is unemployed. Special activities to promote employment of Aborigines and other disadvantaged groups are referred to in the final section of this chapter.

Explanation of Youth Unemployment

3.21 The greater incidence of unemployment among teenagers can be partly explained by the tendency of employers to prefer experienced workers and current employees to inexperienced job seekers; to the influx of school leavers on the labour market in November and December; and to the rate of turnover among teenagers which although lower than for the 20-24 age group is substantially higher than for the whole adult labour force (see Table A.13). Until recently the higher turnover of young people was partly offset by a shorter duration of unemployment, but the position may be changing (see Table A.16).

3.22 What needs explaining is the relative deterioration in the position for teenagers in recent years. The number of school leavers relative to the size of the whole labour force has been high owing to the high level of births in the 1950s and migration. It is perhaps not surprising that when demand for labour fell the effect on teenagers was disproportionately large for the reasons given in paragraph 3.21. Related factors hypothesised as possible influences on teenage unemployment include:

the provision of more generous unemployment benefits in recent years making the necessity to obtain work less pressing. However, evidence of actual cases of 'dole bludgers' is not substantial. Recent tightening of conditions on the payment of unemployment benefits early in 1976 may lessen any influence this factor might have had

- a possible decline in strength of the work ethic and/or an increasing selectivity of teenagers for jobs. There is insufficient evidence on such matters

- the increased cost of employing young people; for example, the relative cost of employing apprentices has increased because of higher charges for workers compensation insurance. Also in some occupations adult rates of pay have been awarded to juniors

- the rapid increase since the early 1960s in married women remaining in or re-entering the labour force (as indicated for recent years in Diagram A.2). However, as implied earlier, they too experience above average unemployment

- a possible increase in the use of credentials by employers, concentrating unemployment among the young who have not, at least yet, acquired them.

Regional Data

3.23 Precise data are not available on unemployment rates for young people by State or region, or of geographic mobility. The movements of youth to metropolitan areas is documented in studies such as Radford and Wilkes which suggests that about one in seven of non-metropolitan leavers moved directly to the cities for work or study.

3.24 Unemployment for 'all persons' is heavier in country areas than in the cities although it is metropolitan unemployment that has increased most in the recent recession. It is heavier among unskilled and semi-skilled workers than among more skilled, although the nature of the unemployment statistics does not allow the calculation of reliable rates for the various skill groups.

3.25 The range across States of unemployment rates for 'all persons' is not large. In January 1976 Commonwealth Employment Service Statistics on registered unemployed showed Tasmania to have the highest rate of 6.9 per cent and WA the lowest at 4.9 with the Australian average at 5.7. In earlier years of lower unemployment the range was considerably narrower, e.g. January 1974 Tasmania, 2.8, the highest and NSW, 1.8, the lowest with Australia at 2.1. Perennially, Queensland has suffered the highest rates. The migration program, recently running at a relatively low rate, may have been partly responsible in dampening interstate differences in unemployment. Interstate migration in Australia is fairly low at under 2 per cent per annum, although intrastate migration as indicated by change of residence normally involves about 15 per cent of the population per annum (Bureau of Statistics, Ref. No. 4.24).

Survey of Unemployed Youth

3.26 Some detailed information on unemployed youth was provided by a survey of unemployed youth registered with the Commonwealth Employment Service on 12 September 1975. This study suggests that youth unemployment is not a single problem. It affects in different

ways younger and older teenagers, males and females, new school-leavers as well as others who left school several years ago. All groups of youth face rates of unemployment far above that for adults. Those handicapped by limited education are the ones most severely affected.

3.27 About 50 per cent of unemployed juniors had attempted education only up to third year secondary standard; of junior males in country areas 57 per cent had not continued past third year. The relative incidence of unemployment among such early leavers can be estimated only if data are available on the educational levels of the labour force aged 15-19. A very rough estimate, based on Tables 3.1 and 3.4, suggests that about 20 per cent have left school at third year or before. Thus the implication is that the unemployment rates for the very early leavers could be twice that for all teenagers.

3.28 Around 40 per cent of unemployed male school leavers were registered under skilled occupations, reflecting, in part, the shortage of apprenticeship openings. The number of apprenticeships started in Australia rose to a record level in 1974 stimulated by Commonwealth Government support. The numbers fell in 1975 although they remained above the pre-1974 levels. The problem of a shortage of apprenticeship places together with an apparent shortage of skilled tradesmen in many areas remains unresolved.

Influence of Demographic and Educational Trends

3.29 Among the population aged 25 and over, proportionately more of the younger groups hold post-school qualifications, (as shown in Table A.7), reflecting the rising levels of educational participation of recent years. The proportion of 16 year olds remaining at school rose from 38 per cent in 1964 to about 54 per cent in the early 1970s; the proportion of 17 year olds rose from 17 per cent to over 30 per cent. The growth has been particularly marked at tertiary level. The number of bachelor degrees awarded by universities began to grow very rapidly at the end of the 1950s and has averaged an increase of about 12 per cent per annum in the 15 years to 1974. Student numbers in CAEs, including teachers colleges, expanded in the period 1968-75 at nearly 16 per cent per annum. These rates of expansion can be contrasted with the growth in the labour force of about 2.5 per cent per annum over the last decade and a projected rate of under 2 per cent per annum for the next. The likely growth in the proportion of the tertiary educated sector of the labour force is suggested by the rise in the ratio of undergraduate students to the population aged 17-22 from, in percentage terms, 11 per cent in 1968 to 18 per cent in 1975. The proportion of the population aged 25-34 in 1971 with some tertiary qualifications was about 10 per cent of males and 7 per cent of females (see Table A.7).

3.30 The rapid increase in the education levels of entrants to the labour force has occurred at the same time as changes in the industrial and occupational structure. However, it has probably led to a rising education level within occupations. Employment in Manufacturing has grown comparatively slowly, but there has been a relative expansion of more capital-intensive industries and more skill-intensive production. In the service industries, as shown in Table 3.8, employment has expanded at over 4 per cent per annum with a

particularly rapid expansion in Community and Business Services which includes health and education and where according to Census data about half the labour force with tertiary qualifications find employment. It is doubtful if this rate of expansion in Community Services will be sustained in future years. In particular, the education sector will experience a much slower rate of growth in student enrolments over the next decade. It is doubtful, therefore, if total employment in this sector will grow at half its recent rate of over 5 per cent per annum. Young entrants may face increasing competition from married women re-entering the labour force. An increasing proportion of the rapidly expanding tertiary-educated labour force, particularly females, may have to find employment in less traditional occupations.

3.31 The effect of the increase in number of highly educated entrants to particular occupations is not obvious. Little study has been made of the educational structure of occupations or the occupational structure of industry in Australia. Information on qualification and educational levels of the labour force was gathered in the 1966 and 1971 Censuses. Within any occupation, with the exception of those with legally prescribed qualifications, a wide range of educational levels is reported, though there is a clear association of higher qualifications with the higher status occupations. Occupations as defined for Census purposes often reflect the qualifications held by persons in an occupation in addition to the type and level of skills actually required for, or the degree of managerial responsibility in, a particular job. Studies in other countries, using more precise definitions of occupation, have failed to establish a close relationship between educational level and occupation, suggesting that experience, on the job training and special courses may substitute for formal education in the acquiring of skills and that various levels of skill such as trade and technician can be substituted to a considerable extent in the large majority of jobs.

3.32 However, if the growth in numbers of highly educated workers is very rapid and their qualifications rather specific (e.g. in primary teaching) their chances of employment in a satisfying occupation may be limited. The capacity of employers to adapt occupational structures to the abilities of the labour force they are able to recruit will also be important in job satisfaction. This is given further attention below.

3.33 Generally, those with final year and post-school qualifications do not have difficulty in obtaining some form of employment, even if an unsatisfying one, although leavers from the final year of secondary school experienced considerable unemployment in 1975. Unemployment tends to fall on the least educated as indicated in paragraphs 3.26 and 3.27 above. It can be argued that the plight of the least educated school leavers has been made worse by the expansion of educational participation. The argument runs that, faced with rapidly increasing numbers of job seekers with more than the minimum qualifications, employers have raised the minimum educational requirements.

3.34 Thus, early leavers face a contraction in the employment opportunities open to them, and an incentive is provided to stay longer at school - and hence to a continued expansion of educational

participation. To the extent that this process excludes early leavers from employment they are capable of performing, it is socially undesirable as well as costly. Against this, it can be argued that the increasing educational levels obtained by young workers make them potentially more productive in addition to any personal benefits (which may of course be negative) they may receive. Research into such questions has led in other countries to considerable dispute about the economic value to society of expanding mass education but little similar work has been undertaken in Australia.

3.35 In part the problem of research in this area is a lack of data on the relationship between education and earnings which is a principle ingredient for much of the argument. Limited data on education and earnings are available from surveys undertaken by the Australian Bureau of Statistics for the years 1968-69 and 1973-74. The private value of tertiary education is suggested by these data and confirmed in studies such as those by Blandy and Goldsworthy, and Selby Smith. Matters for dispute, however, are: the extent to which the earnings are due to extra productivity; and the extent to which any extra productivity is due to education, or merely to the use of credentials to enter the more productive occupations.

3.36 Over the five year period 1968-69 to 1973-74 the mean total income of persons with post-school qualifications increased by 60 per cent compared with a 77 per cent increase for those without post-school qualification. The increase for male graduates was less than 50 per cent compared with nearly 70 per cent for all males. Males in the professional, technical, etc. occupation group had the lowest increase (59 per cent) of any occupation group. However, females in the combined group professional, administrative, etc. had the greatest percentage increase, 109 per cent, compared to the increase for all females of 85 per cent.

3.37 Such changes in the distribution of income were associated with the rapid expansion already noted in the tertiary-educated sector of the labour force. The numbers holding some form of post-school qualification increased from 28 per cent to 33 per cent of full-year full-time workers over the period. Over the same period changes in wage and salary determinations had a marked effect on relativities of earned income. It is apparent then that careful analysis of the data on incomes is necessary before more than tentative interpretation of the changes can be made. It might also be noted that there is a considerable variation in incomes within any group of given education, age and sex, as indicated by a National Survey of Income by the Australian Bureau of Statistics in 1973.

3.38 The reduction in employment opportunities in the education sector due to demographic change was noted above. A further demographic impact on employment comes through the gradual aging of the labour force. Diagram A.1 below shows the relative deficit of workers aged 35-44 and the bulge in the numbers under 30. As the expansion of the work force and possibly economic growth will be less rapid in the future the career prospects of current entrants to the labour force would appear considerably less bright than for those entering in the fifties and the sixties. Those now in their twenties and thirties

would have the edge of experience and job tenure over new entrants. This change in structure of the labour force would possibly more than offset any advantage that might accrue to young people from the reduction in supply of school leavers from the late 1970s, associated with the fall in births in the years after 1961.

3.39 In conclusion, the likelihood of reduced access to interesting jobs and of slower promotion prospects for young workers on the one hand is coupled with high expectations quite possibly based on the knowledge of the career progress of older acquaintances and family. In addition, it is likely that the education young people are receiving is leading them to expect more from their jobs than did former generations. The possibility for increased frustration and disappointment is, therefore, not inconsiderable.

YOUTH EXPECTATIONS AND EARLY WORK EXPERIENCE

3.40 There has already been considerable discussion in Chapter 2 of the aspirations and expectations of youth. Attention here is concentrated on attitudes to work before and after leaving school and entering the labour force. Separate comment is made where possible on various sub-groups of school leavers but data are inadequate for in-depth discussion.

3.41 The major information available comes from such studies as those by Anderson and Beswick, W F Connell et al., Poole and Simkin, R W Connell, and by Tinney et al. in their in-depth study of 34 school leavers in Melbourne. Perhaps the most striking finding is that while work is not specially satisfying it is on the whole preferred to school by the majority of youth. There are however considerable differences particularly by socio-economic background and sex in relative satisfaction with school versus work, in job aspirations and expectations, in self esteem and in actual entry to higher status occupations.

3.42 Pupils from upper socio-economic status homes are likely to find school more satisfying than lower status pupils. They are also the pupils who are most likely to achieve success at school and to have the highest aspirations. The greater access of high status pupils to school resources, to higher status occupations and further study is documented in the studies by Radford and Wilkes (Chapter 8), F J Hunt in Melbourne and Blandy and Goldsworthy in SA. Those who do not fulfil their aspirations are likely to come largely from working class families and to be members of minority groups. Poole and Simkin found that home background was not only associated with school achievement and academic motivation but was independently a major factor in explaining early leaving among girls.

3.43 Working class students it appears do not have different views from upper class pupils on the status of occupations. However, Connell et al. remark that, as their stock of information about the world grows, some appear to resign themselves to a subordinate place in it. R W Connell suggests that the poorer school performance of these pupils leads them to feel they do not have 'the brains' to achieve their aspirations. He remarks too that in revising down their

expectations working class girls especially are likely to change from professional to a semi- or un-skilled occupation; upper class girls are likely to exhibit more confidence and even if doubting their ability for professional work are likely to aspire to para-professional occupations. Tinney also notes the lack of confidence among some young people who 'left school with considerable lack of self esteem or capacity to evaluate their own strengths. They did however have an exaggerated understanding of their weaknesses'.

3.44 In choosing a job many young people appear to have little understanding of what work actually entails. Few children have much knowledge of the work their parents undertake (Tinney et al.). However, Connell et al. show that a sizeable proportion of children in Sydney had part-time jobs while at school. Boys have part-time jobs from an early age, particularly in delivering papers and groceries. The proportion rises to over 30 per cent at age 16. However, less than 10 per cent of 14 year old girls have jobs. The proportion rises rapidly particularly among working class girls on reaching the minimum age for employment in shops. A word of caution on the advantage of such work experience is put forward by Tinney who found that those with early work experience were least likely to achieve their aspirations.

3.45 Recent developments in work experience programs in secondary schools are as yet largely unevaluated. One study in NSW however found that job aspirations were little affected by the program.

3.46 Children have access to a variety of vocational guidance and counselling facilities, as discussed in Chapter 2 particularly in the final years of secondary school. However the ACTU Survey of Young Workers, Connell et al., Poole and Simkin, all indicate that the guidance received was not of much importance in the choosing of a job. A common answer to the question 'Did any person particularly influence you in deciding what kind of job to take' was 'Myself' (Connell et al. p 220). Some detailed analysis of vocational guidance literature, discussed in a recent issue of Education News, suggests a channelling of girls away from a wide range of employments even though there are no formal or legal reasons for such discrimination.

3.47 Job satisfaction among young workers appeared highest among males who entered trades. The nature of the work itself ranked highest among the aspects liked by males whereas for girls the people at work were the most important factor. On a different set of questions the ACTU survey concluded that females did not show a significantly lower rate of job satisfaction than males, but agreed that male apprentices showed the highest rates of satisfaction. Incidentally, the ACTU study noted that quite a number of young people indicated that the job they entered was not what it had been represented to be.

3.48 Tinney et al. provide insights into the transition to work and aspects of satisfaction. Among the main problems of beginning work was that of adjusting to fellow workers and the 'boss'. The complex hierarchy in work places caused confusion and anxiety. They also comment that 'The least stimulating jobs appeared to be office jobs mainly carried out by girls in government or other statutory organisations. Most of those employed in these jobs emphasised that

one day was very much like another:

> We process them and put them onto paper tape ready to send to the computer. We go through and punch all the information to the paper tape and that's all we do all day. We just keep doing them ...'

3.49 Those in boring jobs are not necessarily those to change jobs most often. This may reflect the lack of self esteem particularly among girls who also lack opportunities. Tinney et al. found that many just put up with boring work. Also, the job turnover of young people should not be exaggerated. The proportion holding two or more jobs in a twelve-month period is consistently lower for persons 15-19 year than for those aged 20-24 (as indicated by Table A.13). Tinney et al. suggested that those who changed jobs most often appeared to move towards more remunerative or satisfying work.

3.50 In summing up on job satisfaction, Tinney et al. noted a desire for:

- independence, a degree of control and initiative
- good relationships with boss and fellow workers
- appreciation by employer of work done and reward for it allowing enhanced self-esteem
- variety in the work undertaken.

Such aspects are similar to those delineated by Emery to be important for job satisfaction, discussed in paragraph 3.57 below.

3.51 Young people appear to accept the necessity of work not only for money but for something to do including relationships with other people. However, a substantial minority in Tinney's small study would not have worked if they had sufficient money. Connell et al. concluded that 'the world of work, it appears, is already experienced as something alien and intractable'.

EMPLOYERS, UNIONS, JOB DESIGN

3.52 Little is known of the process by which employers determine their recruitment policies, their expectations of employees and their organisation of the work situation. It appears that employers generally use school credentials as a major factor in screening recruits. It is possible that the recent trend to the abolition of school certificates below the final year of secondary schooling has had the unintended effect of leading some employers to raise their requirements. A Report of the Working Party on School Leaver Assessment and Reporting 1975, Education Department, SA, indicated that employers were expressing concern at the lack of general benchmarks against which to gauge a potential employee's educational achievements.

3.53 Some employers express concern at the level of literacy of their recruits, particularly for clerical employment. Recent migrants from non-English speaking origins are likely to face particular problems in such employment. Employers are also said to expect

recruits to conform in matters of punctuality, respect for authority, appropriate neat clothing and to have some knowledge of what work is about. It is also suggested, that young workers should not have expectations beyond their current capacities. Against this, as noted earlier, many school leavers lack self-esteem and are overaware of their shortcomings.

3.54 Many larger private employers, both State and Commonwealth Public Services and large instrumentalities such as Telecom Australia provide a variety of induction and training programs for young workers. Recruitment to the Commonwealth Public Service where total employment was in the vicinity of 280,000 in 1974 is oversighted by the Public Service Board. The Board uses various selection tests and interviews in choosing among applicants. In 1974 nearly 80,000 people sat for tests and over 25,000 appointments to permanent positions were made, some 10,000 of these from persons under 21 years. A variety of specialist courses and short introductory courses is available to new entrants. In addition over 17,000 public servants in 1974 received time off to undertake approved courses at educational institutions, the large majority on a part-time basis.

3.55 About half the labour force is employed in firms with fewer than 100 employees. With the exception of apprenticeship training, training programs are likely to be rare in such establishments. There is in fact no formal requirement outside apprenticeship in Australia for youth to be provided with training or paid leave to undertake it. Government activities to promote training are considered further in the following section. The involvement of employers with technical and further education institutions particularly in the initiation of trade training courses is considered in Chapter 4.

3.56 As mentioned by Connell et al. young workers typically take little interest in union affairs. Individual unions and the various councils of trade unions at the State and Federal level do provide information and assistance to youth. This ranges from information on union activities through seminars, to the active interest of the shop steward or job delegate in the young worker on the job.

3.57 Unions strongly support the provision of apprenticeship positions by employers. They have however generally opposed the amendment of apprenticeship conditions to allow adults to undertake trade training. Federal awards usually require apprenticeships to be completed by age 23 so that young people who do not commence training by 19 have difficulty in ever becoming formally qualified in many trades.

3.58 Unions in Australia have tended to be conservative in relation to new developments in management and job design and worker participation. Proposals for job redesign as discussed below have however received positive responses by some unions, subject to the protection of award conditions.

Job Design

3.59 Many work situations are organised on a hierarchical basis under a supervisor with job tasks segmented as far as possible into

simple components which can be performed without a great deal of skill. This is clearly the case in large scale manufacturing industry, but also in much clerical work in government as noted in paragraph 3.48 above. The principle of the segmentation of tasks as proposed by the Scientific Management school, and the principles of progressive manufacture of Henry Ford, together provided a means of harnessing the relatively unskilled workforce of their time in a productive fashion. Today however, the rigid application of such principles has been criticised as creating boring, alienating jobs for employees. These jobs do not necessarily meet the needs of today's more sophisticated workforce, nor the needs of employing enterprises - subject as these are to increasingly rapid change. The presumption that extreme segmentation of tasks promotes higher productivity is now being questioned in many public and private organisations.

3.60 Dr Fred Emery now at the Australian National University and others have formulated a list of the desirable features of work that should be promoted in job redesign. In summary:

- responsibility - the need for some responsibility for decision making
- learning - some chance to learn on the job
- variety - the need for the content to be reasonably demanding and to provide some variety
- social support - some sort of recognition within the organisation
- meaning - the need to be able to relate the work to the nature of the organisation and to life in the community
- personal growth - the need to feel the job leads to come sort of desirable future.

3.61 Proposals for job redesign include schemes for 'horizontal job enlargement' such as increasing the range of tasks by job rotation, and 'vertical job enlargement' involving increased responsibility for the planning and organisation of work. Experiments in job enlargement are being undertaken in both public service and private organisations. Helen Andreatta and Bronwen Rumbold of the Department of Employment and Industrial Relations have illustrated some of the Australian experiences. Examples include breaking down the assembly line procedures in the manufacturing of toasters and in clerical work in the Taxation Office.

3.62 A further step in job redesign is for greater worker participation in management through the establishment of self managing groups working on whole tasks. Volvo's Kalmar plant in Sweden is the best known example. Experiments in Australia include schemes at a new plant by ICI Australia and in the personnel section of the Department of Overseas Trade.

3.63 There are many claims and some documentation that the experiments in job redesign lead to maintained or higher productivity.

Dr Emery claims that 'if reasonably sized groups have accepted a set of production targets and have the resources to pursue it at reasonable reward to themselves they will better achieve those targets than they would if each person was under external supervisory control'.

3.64 The consideration of methods of job redesign appears to be spreading even if its adoption is fairly isolated and usually related to the action of an individual employer or manager. Major attention was drawn to the quality of work life by submissions to the Royal Commission on Australian Government Administration during 1975 and by the discussion in the recent Green Paper Policies for Development of Manufacturing Industry (Jackson Report, October 1975). Appendices to this paper recently published include a study of the work situation in 32 factories by a group led by Associate Professor Ford of the University of New South Wales, and a report on worker participation by Dr Philip Bentley.

3.65 Recent improvements in conditions of work and terms of employment have made work more bearable for many employees. Flexible working hours, paid maternity and paternity leave have been introduced in parts of the public and private sector, and several months paid long service leave are available after 10 to 15 years continuous service. Physical and health aspects of work have generally continued to improve.

RECENT POLICY INITIATIVES

3.66 A considerable amount of material has been prepared recently for the OECD by what is now called the Department of Employment and Industrial Relations: The Role of Women in the Economy, 1973. Manpower Policy in Australia, 1974 (for the Manpower Policy Review) and the Insertion of Youth into Working Life: A Thematic Examination for the OECD April 1975. Attention is given here to recent developments with reference to the creation of job opportunities, incentives for the provision of training, information and counselling services and special help for disadvantaged groups.

3.67 In the promotion of job opportunities, until recent years, major reliance was placed on macro policies. The emergence of more persistent unemployment coupled with inflation led to increased attention to Active Manpower Policy which is seen to include programs for the reallocation of labour and local employment creation; rapid retraining for unemployed workers; and the improvement of labour market information and counselling.

3.68 The major program of job creation introduced in recent years was the Regional Employment Development Scheme (REDS). Commonwealth funds were provided for State and Local Government initiatives largely with the view to creating employment in regions of high unemployment. It was used more widely as a counter-cyclical policy with about 27,000 employed by May 1975 but is now being phased down. A variety of other assistance for the development of selected regional areas also promotes employment.

3.69 A scheme designed to promote employment as well as training was the National Apprenticeship Assistance Scheme (NAAS), introduced at

the beginning of 1973. The scheme provides a subsidy to employers who increased their number of apprentices or whose ratio of apprentices to tradesmen equals 25 per cent. The number of new indentures which had averaged about 33,500 per annum in the period 1970-72 rose sharply to 39,000 for the calendar year 1974. In spite of an increase in the subsidy under NAAS in 1975 the number declined to under 37,000 and is slightly down in 1976. As discussed in paragraph 3.28 above the problem remains of maintaining new training opportunities under apprenticeship or other schemes in a time of relatively low economic activity.

3.70 Following the recommendation of a Committee of Inquiry into Australian Labour Market Training in May 1974, the Commonwealth government in October 1974 introduced NEAT, the National Employment and Training System, a labour market training scheme. Its current operational objectives are:

- to provide the opportunity for training for employment in occupations which are in demand to individuals who cannot obtain employment with their current skills
- to offset the employment problems of groups of employees by providing specifically designed training programs
- to contribute to the supply of skills identified as being in short supply by provision of special training programs.

Training may be by formal courses at institutions on a full or part-time basis or by on-the-job training or by a combination of both of these forms of training.

3.71 In the more buoyant economic conditions operating at the time of the scheme's introduction, the emphasis on training under NEAT was on the provision of assistance with training in formal courses. Currently, while formal trainees represent a significant proportion of total trainees emphasis is being given to the encouragement of on-the-job training. Trainees in formal training receive a means tested allowance which incorporates a needs based component and a component specific to the undertaking of training. Trainees in on-the-job training receive at least the award wage for the job and employers are subsidised in respect of trainees whom they employ.

3.72 Originally a large proportion of NEAT trainees were persons seeking to improve their level of skill although the majority of approvals was in respect of unemployed persons. With current, far higher levels of unemployment, the scheme is now being directed to give priority to labour market needs whilst concentrating assistance to the out-of-work. Numbers in training under NEAT reached about 14,000 in mid-1975 and in March 1976 were about 7,500 or 0.12 per cent of the estimated total labour force.

3.73 Assistance under the NEAT scheme has not been directly available to school leavers. However, as at December 1975 some 25 per cent of all NEAT approvals had been for persons under 21, and half of these for persons under 18. The majority of these young people are

assisted under a Special Assistance Program (SAP). SAP was introduced as part of NEAT to secure continued training of apprentices facing cancellation or suspension of indentures by their employers due to adverse economic conditions. At the end of February 1976 the employers of some 1,200 apprentices were receiving assistance under SAP, representing 53 per cent of employees being assisted in in-plant training at that time.

3.74 As mentioned earlier, in the restructuring of the NEAT scheme in 1975 greater attention was given to the prospects for employment with particular forms of training. The Department of Employment and Industrial Relations has expanded its short term forecasting activities with a view to providing labour market information for NEAT and also as a guide to immigration policy and for general job counselling by the Commonwealth Employment Service. Longer term forecasting has also been commenced for specialist occupations requiring lengthy training. However, such work is in its infancy. There are particular dangers in such forecasting as noted in overseas studies and referred to in the former Department of Labour report (Sharp Report) on overseas manpower practices.

3.75 To stimulate industrial training the National Training Council was established in December 1973 to advise the Minister for Employment and Industrial Relations on training matters in all sectors of industry and commerce. The Council actively encourages manpower training efforts in the private sector as an essential element in enabling Australian enterprises and organisations to make the best use of their labour resources. It does this through measures such as the formation of Industry Training Committees, which at the beginning of 1976 covered some 15 industry sectors and 30 per cent of the private workforce; and through subsidies provided by the Commonwealth Government for the employment by industry organisations of Manpower Development Officers, and for attendance at trainer training courses.

3.76 Counselling and information services provided by Commonwealth and State authorities have been discussed in the documents prepared by the Department of Employment and Industrial Relations and are discussed in paragraphs 2.110-2.141 above.

3.77 Special attention to the employment problems of women is promoted by a Women's Bureau in the Department of Employment and Industrial Relations, and by units in other government bodies particularly the Commonwealth Public Service Board. In some States special efforts are being made to improve the access of country school leavers to information on job opportunities, but they are still at a disadvantage in applying for jobs in the cities. Similarly special consideration has been given to the problem of migrants particularly those from non-English speaking background.

3.78 The Department of Employment and Industrial Relations makes particular efforts to promote employment for Aborigines. Special counselling including visits to possible places of employment is provided, and prevocational courses organised, in NSW for example, through the Department of Technical and Further Education. Assistance is also available for the employment of Aborigines under the NEAT scheme. Also, the Department of Aboriginal Affairs, in co-operation with Employment and Industrial Relations supports special workers projects which usually involve a training component.

3.79 A detailed discussion of provision for the handicapped is included in a report prepared by a Working Party on the Transition from School to Work for the Australian Education Council. The major efforts at helping these groups appear to be in special counselling provided by the Commonwealth Employment Service with close liaison with relevant educational authorities and institutions. The provision of more work experience is seen as a particular need.

3.80 There is considerable co-operation between government departments of education and employment at both State and Commonwealth levels. This cooperation is most notable in the provision of counselling services, and in the representation of various Departments on joint study groups into for example pre-employment work experience. However, there has so far not been sustained co-operative investigation of the education/employment nexus.

TABLE 3.1

SCHOOL LEAVERS BY GRADE OF LEAVING BY SEX 1974-75(a)
(Per Cent)

Year of Schooling(b)	M	F	P
Other(c)	2.1	1.4	1.8
7	0.3	0.3	0.3
8	4.7	4.1	4.4
9	9.8	10.7	10.2
10	33.7	35.4	34.5
11	14.3	14.6	14.5
12	35.1	33.5	34.3
Total	100.0	100.0	100.0

(a) These are leavers between August 1974 and August 1975.
(b) Year of schooling as at August 1974.
(c) 'Other' includes leavers from grades prior to year 7 and from ungraded classes.

Source: Commonwealth Department of Education

TABLE 3.2

SCHOOL LEAVERS BY AGE OF LEAVING BY SEX 1974-75(a)
(Per Cent)

Age(b)	M	F	P
13	1.6	1.3	1.5
14	14.2	16.1	15.1
15	26.8	29.1	27.9
16	25.3	24.7	25.0
17	24.0	24.1	24.0
18	6.5	4.0	5.3
19+	1.5	0.9	1.2
Total(c)	100.0	100.0	100.0

(a) These are leavers between August 1974 and August 1975
(b) Age at August 1974
(c) Any discrepancies in total are due to rounding.

Source: Commonwealth Department of Education

TABLE 3.3

GRADE OF LEAVING BY SEX AND METROPOLITAN AND NON-METROPOLITAN REGIONS, 1971-72

(Per Cent)

Grade at Leaving	Metropolitan		Non-Metropolitan		Total		
	M	F	M	F	M	F	P
Terminal	36.5	31.3	23.9	22.3	30.9	27.3	29.1
T - 1	18.8	18.7	17.6	20.1	18.3	19.3	18.8
T - 2	31.6	35.3	40.0	41.6	35.3	38.2	36.7
T - 3	10.2	11.8	13.2	12.5	11.5	12.1	11.8
T - 4	2.7	2.9	5.1	3.4	3.8	3.1	3.5
Earlier	0.1	0.2	0.4	0.3	0.3	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Source: W C Radford and R E Wilkes: School Leavers in Australia 1971-1972, Australian Council for Educational Research, 1975.

TABLE 3.4

PERCENTAGE OF SCHOOL LEAVERS PROCEEDING TO FURTHER STUDY: ESTIMATES FOR 1974

	Full-time	Part-time	Total
University	9.1	0.7	9.8
College of Advanced Education	7.6	1.2	8.8
Other - including Technical and Further Education	6.3	18.1	24.4
Total	23.0	20.0	43.0

Note: This table was obtained by combining results from Australian Bureau of Statistics, Ref. No. 6.9, with results from the annual collections of the Universities Commission and the Commission on Advanced Education.

Source: Commonwealth Department of Education

TABLE 3.5

SCHOOL LEAVERS 1974: EDUCATION EXPERIENCE IN MAY 1975
(per cent of Total Leavers)

In the Labour Force: 76%			
Of which:	Studying courses greater than 1 year's duration		19
	Attending part-time	15	
	Correspondence	1	
	Full-time (a)	4	
	Studying courses less than 1 year's duration		1
	Withdrawn or completed courses		3
Not in the Labour Force: 24%			
Of which:	Studying courses greater than 1 year's duration full-time		19
	Studying: Other		1
Total studying since leaving school			43

(a) Of the 3.7 per cent of leavers studying full-time who are in the labour force 3.1 per cent are working part-time.

Source: Estimated from Australian Bureau of Statistics, Ref No. 6.53 (May 1976), Table 5.

TABLE 3.6

SCHOOL LEAVERS, 1970 and 1974, EMPLOYED IN MAY 1975 BY OCCUPATION

Occupation group	Left school in			
	1970	1974	1970	1974
	Number ('000)		Per cent	
	Males			
Professional, technical, etc.	12.4	*	12.2	*
Clerical	16.5	11.4	16.2	12.9
Sales	5.6	7.3	5.5	8.2
Farmers, fishermen and timber-getters, etc.	7.7	9.1	7.6	10.2
Transport and communication	4.4	*	4.4	*
Tradesmen, production-process workers, labourers, n.e.c. (a)	48.8	52.9	48.0	59.5
Service, sport and recreation	4.4	*	4.4	*
Total (b)	101.7	88.9	100.0	100.0
	Females			
Professional, technical, etc.	18.4	7.8	23.7	10.6
Clerical	35.5	32.9	45.7	44.7
Sales	6.2	16.4	8.0	22.3
Tradeswomen, production-process workers, labourers, n.e.c.	6.7	6.1	8.6	8.3
Service, sport and recreation	9.3	8.8	12.0	11.9
Total (c)	77.6	73.6	100.0	100.0
	Persons			
Professional, technical, etc.	30.8	10.5	17.2	6.5
Clerical	52.0	44.4	29.0	27.3
Sales	11.8	23.7	6.6	14.6
Farmers, fishermen and timber-getters etc.	8.5	9.8	4.8	6.0
Transport and communication	5.0	*	2.8	*
Tradesmen, production-process workers, labourers, n.e.c. (a)	55.5	59.0	31.0	36.3
Service, sport and recreation	13.7	11.8	7.7	7.3
Total (b)	179.3	162.5	100.0	100.0

(a) Includes miners and quarrymen. (b) Includes administrative, executive and managerial workers. (c) Includes administrative executive and managerial workers; farmers. etc,. and transport and communication workers.
*less than or based on a figure less than 4,000.

Source: Australian Bureau of Statistics, Ref. No. 6.53 (May 1976) Table 7.

TABLE 3.7

SCHOOL LEAVERS, 1970 AND 1974 EMPLOYED IN MAY 1975 BY INDUSTRY

Industry division	Left school in 1970	1974	1970	1974
	Number ('000)		Per cent	
Males				
Agriculture, forestry, fishing and hunting	5.7	8.7	5.6	9.8
Manufacturing	27.5	25.3	27.1	28.4
Construction	12.1	12.2	11.9	13.8
Wholesale and retail trade	18.0	21.3	17.7	24.0
Transport and storage	5.1	*	5.0	*
Finance, insurance, real estate and business services	7.4	6.5	7.3	7.3
Public administration and defence	6.4	*	6.3	*
Community services	7.8	*	7.7	*
Entertainment, recreation, restaurants, hotels and personal services	4.7	*	4.7	*
Total (a)	101.7	88.9	100.0	100.0
Females				
Manufacturing	10.7	6.9	13.8	9.4
Wholesale and retail trade	15.4	29.0	19.8	39.4
Finance, insurance, real estate and business services	10.7	11.5	13.8	15.6
Public administration and defence	4.3	4.2	5.6	5.7
Community services	24.9	12.6	32.1	17.2
Entertainment, recreation, restaurants hotels and personal services	6.0	7.0	7.7	9.6
Total (a)	77.6	73.6	100.0	100.0
Persons				
Agriculture, forestry, fishing and hunting	6.4	9.4	3.6	5.8
Manufacturing	38.3	32.2	21.3	19.8
Construction	13.1	12.6	7.3	7.7
Wholesale and retail trade	33.4	50.3	18.6	31.0
Transport and storage	7.1	*	4.0	*
Communication	*	*	*	*
Finance, insurance, real estate and business services	18.1	17.9	10.1	11.0
Public administration and defence	10.7	7.8	6.0	4.8
Community services	32.8	14.0	18.3	8.6
Entertainment, recreation, restaurants, hotels and personal services	10.7	10.4	6.0	6.4
Total (a)	179.3	162.5	100.0	100.0

(a) Includes industries for which figures are too small to be shown separately.
*Less than or based on a figure less than 4,000.

Source: Australian Bureau of Statistics, Ref. No. 6.53 (May 1976) Table 6.

TABLE 3.8

EMPLOYEES IN INDUSTRIAL AND SERVICES SECTORS:
NUMBER IN 1975* AND ANNUAL RATE OF GROWTH 1964-74

Industrial	No ('000)	Rate of Growth %
Forestry and Fishing	15	1.5
Building and Construction	390	1.9
Electricity, Gas, Water	120	1.7
Mining	81	5.6
Manufacturing	1312	1.6
TOTAL	1917	1.7

Services	No ('000)	Rate of Growth %
Transport and Communication	394	2.1
Commerce	834	3.1
Finance and Property	236	4.5
Other General Government	246	5.1
Community and Business Services	823	5.8
Entertainment	328	6.1
Defence	69	3.1
TOTAL	2931	4.1

* Seasonally adjusted, first half year

Note: 1. The industrial classification differs from that used in Table A.11 below.
2. Agriculture is not included.

Source: The Australian Economic Review, 3rd Quarter 1975, derived mainly from Australian Bureau of Statistics Ref. No. 6.4.

CHAPTER 4 TRANSITION TO POST-SCHOOL STUDY: TECHNICAL AND FURTHER EDUCATION

INTRODUCTION

4.1 Emphasis is placed in the chapter upon features of government administered technical and further education (for which the acronym TAFE is commonly used in Australia) having relevance for school leavers. Post-school education in universities and CAEs is considered in the following chapter. Particular attention is devoted to the nature of TAFE, its extent, its educational provisions, access to courses and the training it provides for tradesmen and para-professionals.

4.2 The chapter begins with a discussion of the way the term 'technical and further education' is used in Australia. It includes information about secondary school leavers for whom TAFE provides the major further study option.

4.3 The activities of the Australian Committee on Technical and Further Education (ACOTAFE) are described and the results of its investigations into TAFE in Australia outlined.

4.4 The establishment of the Technical and Further Education Commission (TAFEC) as a national planning and policy co-ordinating body is considered and current issues with which the Commission is concerned are discussed.

ACOTAFE REPORTS

4.5 There have been very few comprehensive studies of TAFE in Australia before the two recent ACOTAFE reports (April 1974 and May 1975). It should be noted, therefore, that as well as outlining their findings, this chapter draws heavily on them in all sections.

THE SCOPE OF TECHNICAL AND FURTHER EDUCATION IN AUSTRALIA

4.6 Chapter 1 of the first report of the Australian Committee on Technical and Further Education (ACOTAFE) begins with a discussion of the scope of TAFE. After noting the difficulties of precise definition in an educational field so characterised by change and variety, the Committee concluded that it was more appropriate for it to describe the activities of TAFE than to attempt to develop definitions which could be so broad as to be meaningless.

4.7 The Committee stated that the activities of TAFE covered those forms of education which enabled individuals to:

- acquire or make progress towards acquiring, by full- or part-time studies, assessable occupational qualifications involving mental, manual or social skills; and/or

- acquire or seek to acquire, usually on a part-time basis, knowledge or skills for secondary, additional or supplementary occupational purposes, or for the purpose of personal development or enrichment, or to utilise leisure creatively.

4.8 The Committee noted that the characteristic which distinguished these two categories is that the former usually led to formal occupational qualifications, was relevant to immediate employment purposes, and that appropriate courses leading to these ends were usually provided in technical colleges. Courses in the second category were usually less formal and could be described as adult education. These courses were also frequently available in technical colleges.

4.9 The Committee listed the following educational options as existing within the TAFE framework described above:

- apprenticeship and post-apprenticeship courses
- various non-indentured courses for skilled workers
- certificate and sub-diploma courses for technicians in manufacturing industries and similar level courses for persons in commerce, community service, rural, mining, artistic, and other industries
- courses which can lead to full professional status or which enable professionals to update their technology or to specialise
- courses which can be broadly described as preparatory or bridging, that is, leading to higher courses of study, or short courses in job skills or particular kinds of knowledge
- courses of an informal kind and varying in length from a number of years to quite short periods in any aspect of technology, science, liberal studies, self-expression, home handicrafts and cultural appreciation.

4.10 Consistent with the Committee's discussion and analysis of the scope of TAFE, the Act which established the Technical and Further Education Commission (TAFEC) in May 1975 defined TAFE as education provided by way of a course of instruction or training:

- that is, or that is preparatory to, a course of a kind relevant to a trade, technical or other skilled occupation; or
- that otherwise meets the educational needs of persons who are not enrolled in a full-time course of primary or secondary education at a school.

4.11 The discussion in this chapter of TAFE as a study option for school leavers is conducted within the framework of the above definition and descriptions.

SCHOOL LEAVERS PROCEEDING TO TECHNICAL AND FURTHER EDUCATION

4.12 As mentioned in Chapter 3, an estimated 230,000 students left school in 1975. If the pattern which applied in 1974-75 continues to operate, about 43 per cent or nearly 100,000 of these leavers will

proceed immediately to some form of post-secondary study. About 19 per cent or roughly 45,000 will proceed to study at universities or CAEs, the great majority on a full-time basis. The majority of the remaining 25 per cent of leavers who proceed to further study (about 60,000) undertakes part-time courses in TAFE. A very much smaller proportion enter TAFE courses on a full-time basis and a further small group take courses provided by agencies outside the government TAFE framework. Precise data on the numbers involved are not currently available nor have any studies on the latter group been undertaken. All that is known with any certainty is that the majority of the group is probably female and is taking commercial courses at private business colleges.

4.13 Chapter 3 also notes that at least 65 per cent of all school leavers in 1974-75 had not completed the final year of secondary school. Despite the rising retention ratios and the emphasis on full secondary education for all students noted elsewhere in this paper, it is clear from this that the incidence of early leaving from secondary school remains high in Australia. Over half of the students who left in 1974-75 were in year 10 or below in 1974.

4.14 Several studies, including the one conducted by Connell and his associates in Sydney, suggest that trade training is easily the most popular employment/further study option for those contemplating leaving school. As is discussed in more detail below, the maximum educational prerequisite for admission to TAFE trade courses is the satisfactory completion of year 10 of secondary school; in many instances lower educational standards are specified. A large number of the students leaving school following the completion of year 10, as well as many leaving earlier, has therefore obtained the educational qualifications needed for entry to their chosen occupation and the further study associated with it. In 1974-75 a total of 35,000 became apprentices and commenced appropriate trade courses provided by State TAFE authorities. Of these, probably about 30,000 were boys. Thus about a quarter of all male school leavers take up apprenticeships, although not all do so on leaving school.

4.15 A large number of the middle level or para-professional courses offered by TAFE institutions has satisfactory completion of year 10 as the educational prerequisite and an increasing number of young people is proceeding to this further study option, usually on a part-time basis and in association with content-related employment. A significant number of students leaving secondary school in year 11 may be using this avenue of further study. A small but increasing number of students who have completed year 12 is also proceeding to further study in the para-professional and trade streams of TAFE. It is thought that this group could reduce the opportunities of year 10 and earlier leavers obtaining employment and thus undertaking the further study associated with it.

4.16 As was noted in Chapter 2, many of the young people leaving school at or before the end of year 10 do so for reasons which have no relation to their further study prospects. Irrelevance of the secondary curriculum to their needs, the lack of personal autonomy, and the constraints of the formal school environment have been seen as major factors in the alienation from school experienced by these young people. The personal independence and sense of achievement which they

see employment giving them frequently outweigh other considerations when the choice between school and work is made.

4.17 Amongst the group of students who leave school before year 10 many have not reached the statutory leaving age and are given exemption from further attendance at school. Frequently such students have adverse family circumstances or major behavioural and adjustment problems in the school situation. They are almost invariably from lower socio-economic backgrounds. Such school leavers are at a serious disadvantage in gaining employment and in improving their qualifications as their educational level is below the minimum required for entry to most TAFE vocational courses. It seems essential for more flexible admissions policies to exist in TAFE and for a re-examination of employment policies to be undertaken if the disadvantages facing these young people (and often, their families) are not to be perpetuated.

4.18 One aspect of TAFE that is constantly emphasised is its accessibility. That there are limits to this is apparent from the previous paragraph. This question is discussed in more detail in a later section of this chapter but it may be noted here that despite the claims made for its accessibility, TAFE attracts only 25 per cent of all school leavers and less than half of those leavers for whom it is the only immediate further study option although considerable numbers of other school leavers may embark on TAFE courses after a period in the labour force. Clearly the potential of TAFE to cater for school leavers has not yet been fully exploited and the means by which this can be achieved is one of the major issues facing TAFE policy makers.

FEATURES OF AUSTRALIAN TECHNICAL AND FURTHER EDUCATION

Introduction

4.19 Significant variations in organisation, administration and operation between State government TAFE authorites make accurate generalisations about the nature of provisions in this sector of education difficult. This section is aimed, therefore, at outlining those features which are broadly similar in all States. It does not attempt to provide a comprehensive account but concentrates on those aspects of government provided TAFE of particular relevance to school leavers.

4.20 The matters discussed in the following section are:

- the organisation and administration of TAFE
- State financing of TAFE and its effect on standards
- courses and enrolments
- patterns of attendance
- access to courses
- course planning

- staffing and teaching in TAFE
- apprenticeship and trade training
- the training of para-professionals.

The Organisation and Administration of Technical and Further Education

4.21 In four of the six Australian States, TAFE is largely under the control of the State education departments which are also responsible for primary and secondary education. These departments have technical education divisions or branches to handle the detailed administration of TAFE. In two of the States, WA and Tasmania, recently completed reports have made recommendations on the restructuring of post-school education which could, if adopted, radically change existing administrative arrangements and remove responsibility for policy on TAFE from the control of the education departments in those States (see Chapter 1 above). NSW and SA already have separate government departments with responsibility for TAFE. In the two Commonwealth territories recent developments have separated the administration of TAFE from that of the primary and secondary school systems. An Interim Technical and Further Education Authority is responsible for policy, planning and development in the ACT while in the NT the council controlled Darwin Community College has overall responsibility for TAFE provisions.

4.22 This question of a separate identity for TAFE within State systems of education has been the subject of considerable discussion recently and the first ACOTAFE report outlines the main issues. Technical education administrators and teachers, in particular, have argued that until TAFE has a separate identity in those States where it is administered as part of the education department, its needs will continue to be subordinated to those of other sectors. The Directors-General of Education in these States appear to have given some weight to this argument by their acknowledgement of the financial priority they must necessarily attach to the primary and secondary schools sectors where attendance is compulsory. The recent proposals for Tasmania and WA mentioned above also suggest that there is substance in the claim that TAFE is at a disadvantage in systems where it is administered as part of the Education Department. It is, as yet, too early to determine whether the recent increase in funds has reduced these problems. Another element in the argument for separate identity has been the low esteem which many technical teachers believe TAFE enjoys. Whether the granting of separate identity would in itself significantly alter such attitudes to TAFE which have developed as a result of historical factors is uncertain.

4.23 In most States, irrespective of the way in which TAFE is administered, the technical college is the main agency for the provision of the TAFE programs of most relevance to school leavers. In 1974 there were 836 institutions providing TAFE in the six States. Of these, 167 were classified as 'principal institutions' (that is, sufficiently large to justify a full-time principal) while the remaining 669 were branches, annexes or centres. Principal institutions had an average enrolment of 2,500 while the others averaged 200. The full range of TAFE provisions listed above in 4.8

are available in the larger principal institutions; smaller institutions offer more restricted programs with an emphasis on those requiring the fewest specialised facilities.

4.24 Victoria differs from other States in the means by which TAFE provisions are made. As discussed in Chapter 2, Victoria maintains a separate system of technical schools which not only provide an alternative form of secondary education but also in some schools offer programs which, in other States, would be provided exclusively by technical colleges (e.g. trade training). In addition, many TAFE programs in Victoria are conducted in independent (i.e. council rather than department controlled) institutions which also offer full tertiary courses.

4.25 Except in Victoria and the Commonwealth territories, (see above) there is currently little effective community involvement in policy making for, or management of, TAFE at State, regional or institution level. Executive responsibility in most cases rests with departmental officials or the senior teaching staff (appointed by the TAFE department or division) at individual institutions. In some States, individual TAFE institutions or particular geographic regions have councils or committees on which the community is represented. In some cases, these committees are concerned with a wide range of matters; in others, their activities are limited to promotional undertakings in support of individual colleges. In all instances such bodies are advisory. Similar variations exist in State boards or councils on technical and/or further education though some have the right to provide ministers of education with independent advice.

4.26 Victoria has a well developed system of councils for particular geographic regions and individual institutions. These councils have been delegated distinct executive and financial responsibilities and control over certain revenues and budgetary allocations. They are seen as agencies through which TAFE institutions may become more accountable to the communities they serve. Victoria and some other States have State Councils or other bodies to advise the Minister on courses, finance and facilities in the TAFE sector.

4.27 Although individual TAFE institutions are strongly oriented to the educational and training needs of the community in which they are located, in general their administration exhibits the same characteristics of centralised control and policy development which exist in other sectors of education under the control of State government education agencies. Both the first and second ACOTAFE reports encourage State TAFE authorities to foster more community involvement and responsibility at both system and institution level. Developments along these lines have occurred since the publication of the first ACOTAFE report.

4.28 In one limited way, all States involve representative groups in educational planning for TAFE. Committees and advisory bodies have been established to provide views and advice on the content of vocational courses and these usually have representatives from employer organisations and trade unions.

State Financing of Technical and Further Education and its Effect on Standards

4.29 Until 1974 the responsibility for recurrent finance for TAFE rested almost entirely with State authorities. TAFE had to compete with universities and CAES until 1974, when States' contributions for the recurrent costs of tertiary institutions ceased. In 1972-73, for example, total recurrent expenditure in the six States on TAFE was less than $100m compared to a little under $1,000m for primary and secondary schooling.

4.30 In the same year capital expenditure from State sources in NSW for TAFE was $3.8m while the amounts for universities and CAEs were $13.7m and $59.5m for schools; comparable figures for WA were $0.9m, $2.8m and $11.2m respectively. The fact that capital figures for the other four States are not available illustrates the extent to which capital funding in TAFE has been bound up with total education department programs. Since 1964-65 the Commonwealth Government has provided the States with capital assistance and until 1973-74, the last year before the introduction of the programs recommended by ACOTAFE, this had totalled almost $109m.

4.31 These figures suggest that despite the high enrolments in TAFE courses compared to those offered by tertiary institutions and despite the fact that TAFE is a major agency for training skilled workers at a variety of levels and for providing recurrent education opportunities, the sector has received a much less favourable allocation of financial resources than other sectors of education.

4.32 The main consequences of this situation have been outlined in some detail in the two reports of ACOTAFE. Indeed, the financial recommendations of these reports are specifically designed to overcome the deficiencies which exist because the sector has been inadequately financed for so long. The reports touch upon the age and unsuitability of many of the buildings and their lack of facilities, amenities and appropriate equipment. They draw particular attention to the inadequacy of libraries and resource centres in many TAFE institutions and to the totally unsatisfactory provisions of support and ancillary staff.

4.33 Both reports see the provision of adequate funds for a wide range of teacher development programs, for research and curriculum development, and for the development of appropriate educational technology and programmed learning materials as critical if the broader, more personalised and comprehensive forms of education for school leavers and adults which they advocate are to be introduced successfully.

4.34 In addition to the very real deficiencies in many aspects of provisions in TAFE occasioned by the financial stringencies under which it is operated, morale amongst those working in TAFE has been low and this has produced low levels of professional esteem amongst many teachers, a reliance on dated methodologies and an unwillingness to experiment with new instructional techniques. The measures proposed by the Committee are, in part at least, designed to overcome such problems.

Courses and Enrolments

Courses

4.35 In carrying out its surveys of TAFE in Australia, the Australian Committee on Technical and Further Education found it necessary to develop a system for classifying the courses offered by TAFE institutions. It devised an approach which permitted student enrolments to be classified by both academic stream, which is related to the purpose served by the course (e.g. vocational, preparatory, recreational), and field of study which is oriented towards course content. Details of the six academic streams and the ten fields of study are given in Appendix B.

Enrolments

4.36 Detailed statistics on enrolments for 1974 in TAFE courses in accordance with the above classifications are set out in the second report of ACOTAFE. The most important features are noted below.

4.37 Total enrolments in TAFE institutions in 1974 (608,090) were more than double those at the other major post-secondary educational institutions, universities (142,859) and CAEs (107,202). The Committee noted that while direct comparison of such enrolment statistics was not completely valid, these figures clearly demonstrated the importance of the TAFE sector of post-school education. The Committee estimated that the number of individuals undertaking TAFE courses in 1974 as about 500,000 or one in twenty of the total post-school population.

4.38 Vocationally oriented courses constituted over 63 per cent of total enrolments in TAFE in 1974. Very few of these were in the professional academic stream; para-professional, trades and other skilled streams comprised approximately 25,21 and 17 per cent of total enrolments respectively. The adult education stream contained the second largest number of enrolments and there were significant numbers in the preparatory stream (see below).

4.39 An examination of enrolments by fields of study reveals the dominance of science and technology courses, especially engineering studies which constituted 22 per cent of all TAFE enrolments. In the non-technological fields, business and commercial studies was the largest single field with 20 per cent of all enrolments.

4.40 Scientific and technological studies accounted for 56 per cent of all enrolments in vocationally oriented courses, particularly in the trades stream, where there was a heavy emphasis on engineering and building studies. The high enrolments in business and commercial courses were concentrated in the para-professional and other skilled streams.

4.41 The Committee noted that the age composition varied with courses. It drew particular attention to the predominance of students under 21 years in the trades stream and concluded that this revealed the existence of barriers against mature-age students entering this

stream. Almost 47 per cent of those undertaking courses in the preparatory stream was under 21, which suggests that TAFE might provide a second chance for some early school leavers to complete secondary education. In all streams, 44 per cent of enrolments was by students under 21. This represents some 260,000 enrolments and indicates the importance of TAFE as a study option for school leavers and young people generally.

4.42 Female students represented two-fifths of all TAFE enrolments in 1974. Female participation was greatest in the 'other skilled' category which contains many courses in secretarial studies and in the non-vocational adult education stream, and lowest in the trades stream. One of the major concerns of TAFE authorities must be to devise means of overcoming the narrow sex stereotyping of vocational options for women evidenced in these data.

Patterns of Attendance

4.43 TAFE students are classed as full-time if they attend classes for fifteen or more hours each week; those attending for fewer than fifteen hours are regarded as part-time. In 1974, more than 86 per cent of TAFE enrolments was part-time; over 4 per cent was full-time and more than 9 per cent was in correspondence courses. As well as highlighting the fact that the great majority of TAFE students combines their studies with other activities (most commonly work or home duties), these figures indicate how small the full-time component of TAFE is and the importance of the external studies provisions made by TAFE authorities.

4.44 As would be expected, part-time enrolments were high in all academic streams; in the trades and adult education streams, there were virtually no full-time provisions. This reflects the nature of trade training in Australia (discussed below) and the non-vocational, recreational nature of most adult education programs. The professional and preparatory streams had the highest numbers of full-time enrolments and also constituted almost 38 per cent of all correspondence enrolments. The para-professional stream was also well represented in correspondence enrolments.

4.45 The emphasis on part-time study in the vocational streams of TAFE may, in part, reflect the continued existence (until very recently) of traditional attitudes towards vocational education. These have seen vocational education as serving the limited purpose of providing the necessary skills and theoretical training associated with particular occupations. Practical on the job experience and concurrent study on a limited release basis or outside work hours altogether has been the characteristic mode for this type of vocational training. Except in the case of apprentices for whom attendance at trade training classes for specified periods each week (usually one day) is a statutory obligation, the majority of employers in the private sector have made few provisions to allow staff to undertake study during work time without penalty until the very recent past. Such approaches are increasingly inappropriate as notions of lifelong recurrent education and alternating periods of work and study gain currency in Australia. This change in attitude can be seen in the support given to increasing

full-time attendance options in TAFE by employer organisations like the Australian Council of Employers' Federations and the Associated Chambers of Manufactures.

4.46 Several practical disadvantages are associated with the current patterns of attendance at TAFE institutions. In many cases a serious under-utilisation of facilities exists because of the heavy emphasis on evening studies and the comparatively light loadings during the day. Although conventional block release and sandwich courses are offered in a number of the vocational streams, there have been few attempts (or indeed, opportunities) to examine course structures, the possibilities of alternative attendance patterns or the implications these would have for students and employers. Moves towards more rational distribution of classes would clearly require a different approach to questions of release and, more importantly, to the principles on which personnel are recruited and employed by employers. There are only limited developments occurring in these directions at present.

4.47 Although little firm information exists (and the need for its collection and analysis is urgent), it seems probable that failure and, more especially, drop-out rates amongst part-time TAFE students seeking vocational qualifications are very high. Factors such as the heavy demands placed on students working and studying concurrently, the quality and kind of instruction provided (see 4.71 below) and the nature of the courses offered have been suggested as possible contributory factors. Again, detailed investigation is necessary before viable alternative strategies can be developed or even contemplated.

4.48 In its first report ACOTAFE argued that it was inequitable that students wishing to undertake a vocationally oriented TAFE course should be denied full-time options open to all proceeding to tertiary studies in universities or colleges. It also maintained that the majority of employers do not have the capacity to provide adequate forms of practical training in many trades or to train all those wishing to enter trades. The Committee concluded that increased full-time options in TAFE institutions would contribute to the development of a more skilled labour force and would also enable all who wished to enter trades to obtain appropriate training.

4.49 Another argument advanced in support of a greater emphasis on full-time studies in TAFE is the need for relevant vocationally oriented alternatives to existing senior secondary school programs to be developed. If such alternative options existed, and if students completing year 10 were effectively counselled, it has been argued that many who now enter employment without genuine interest in the field they have chosen or who remain, dissatisfied, at secondary school would have a viable educational alternative more suited to their needs, interests and aspirations.

4.50 The second report of ACOTAFE drew attention to State predictions of an increase in the proportion of students undertaking full-time TAFE courses between 1974 and 1978, ranging from about 1 per cent to almost 3 per cent of the numbers so enrolled in 1974. The Committee regarded these forecasts as realistic and saw the increased

proportions being assisted by the availability of student assistance benefits to full-time TAFE students. The abolition of fees for vocationally oriented TAFE courses, first introduced in 1974, could also create a growth in the demand for full-time courses. The most important impact of the greater availability of these and related assistance schemes, however, is likely to be less in creating demand for full-time courses than in creating favourable circumstances for the planning and development of such courses.

4.51 The suggestions and proposals about changing TAFE attendance patterns to provide more full-time options are being advanced at a time when there is very limited information available on which to base the policy decisions which would be involved. As was mentioned previously, no comprehensive studies on the effectiveness of current attendance patterns have been undertaken. Despite the support of employers' organisations for more full-time study options, it is doubtful whether the possible consequences for the labour market or current patterns of recruitment and employment of school leavers have been considered in any detail. The extent to which programs of student assistance could be used to encourage school leavers to take up full-time TAFE studies has yet to be examined. Finally, the question of whether full-time courses which are attractive to school leavers can also be designed to meet the needs of employers for trained personnel who are well oriented to work has not yet been seriously taken up.

Access to Courses

4.52 It is generally considered that access to TAFE is a good deal easier than it is to courses in other areas of post-school study. Certainly, it is widely accepted that TAFE should be flexible and that it should offer a variety of programs geared to students' needs and backgrounds as and when the need for them arises.

4.53 To a degree it is true that TAFE courses are more accessible than other post-school options. In 1973 only 45 per cent of all TAFE courses had formal entry requirements whereas only a very small proportion of students were admitted to universities and CAEs without the necessary educational prerequisites. It must be noted, however, that in the vocational streams, 54 per cent of courses specify educational prerequisites; the most popular option for school leavers, trades courses, has educational prerequisites in 50 per cent of the fields available though these are admittedly fairly low. Preparatory courses which, by definition, are a most important TAFE option for many people who have failed to complete their secondary schooling, have prerequisites in almost 50 per cent of cases. Post-trade refresher or upgrading courses usually require the completion of a recognised trade course for enrolment, thus excluding the many adults who have become tradesmen without formal training.

4.54 Although many TAFE institutions have provisions for exemption from educational prerequisites, access is undoubtedly limited in important respects by the insistence upon the possession of specified educational levels for admission. Those most affected by this are school leavers who have not completed year 10 of secondary school and the many adults with a similarly limited educational background.

4.55 Both ACOTAFE reports noted the barriers to access caused by entry requirements. They argued that such barriers are serious and unnecessary impediments, especially to the groups referred to above. A much greater emphasis in TAFE on remedial, preparatory and bridging courses would obviate the need for many of the current entry requirements. Many people qualified to take the current preparatory courses fail to do so because they are not publicised adequately. The Committee considered that the most important reason for this was unsatisfactory counselling in the secondary school and insufficient knowledge on the part of counsellors of TAFE options. One interesting suggestion to overcome these problems is the establishment of programs linking students' school activities with periods of study or observation in TAFE institutions. The Committee thought that TAFE itself should play a more active role in this regard and should also devote more attention to the problem of adult illiteracy.

4.56 The inadequacies of resources and facilities arising from limited funds in the past have also restricted access. In some States not all of those seeking entry to courses in the vocational streams have been able to gain admission because of limited space (and, also, because of traditional notions that classes for part-time students can only be held in the late afternoon or evening). Many courses in the adult education stream have lengthy waiting lists.

4.57 Additional funds being provided under the programs recommended by ACOTAFE will undoubtedly help to overcome the worst of these deficiencies. At the same time TAFE authorities are encouraged to take positive action themselves to ensure that the most effective use is made of resources and facilities and that the programs offered by individual institutions result from rational planning and close analysis of demand.

4.58 Attempts to achieve open and unlimited access to TAFE are inhibited by traditional attitudes to organisation and operation. The constraints imposed by inflexible timetabling have been mentioned as have the limitations created by the absence of a large range of full-time options. The fact that many vocational courses continue to be narrowly based and highly oriented to industry needs rather than directed to the needs and development of the individual is thought to be a serious barrier for many potential students. Associated with this is the prevalence of stereotyped syllabuses and conventional teaching methods which have little appeal to many early school leavers whose rejection of secondary schooling very often stems from the existence of just such approaches. Similarly, adults wishing to re-enter formal education are deterred by such methods and programs which allow little regard to be paid to their special problems or to their maturity of outlook. Some TAFE educators appear reluctant to accept the need to motivate people to pursue TAFE options. They take the view that TAFE students generally are already well motivated as they have sought out opportunities to improve their education. This passivity is also displayed in the way in which new courses are usually only mounted following the external emergence of a demand.

4.59 As might be expected in view of the scarcity of resources which has faced TAFE, provision for disadvantaged groups is variable

and, in many instances, unsatisfactory. Women wishing to undertake TAFE courses face a number of difficulties: some courses have been based upon stereotyped notions of sex roles and have borne designations that express this overtly; rigid timetabling and limited provision of bridging or refresher courses present barriers to women wishing to acquire skills to re-enter the workforce; inadequate vocational guidance and counselling facilities inhibit women from becoming fully aware of the options open to them; and virtually no recognition has been given by TAFE authorities to the provision of child care facilities in promoting access to education and training. The nature of physical facilities in most TAFE institutions precludes effective participation by most physically handicapped people and external studies programs do not, at present, cater adequately for them. People living in rural communities suffer from both the limited range of offerings possible and restrictions in the opportunities to obtain necessary practical experience in a number of vocations ACOTAFE has suggested that positive discrimination is necessary to overcome such problems. No effective mechanisms exist in most TAFE institutions for communication with ethnic groups or to assess their special needs; little has been done to date to deal with the major barrier facing migrant groups in entering TAFE - the problem of inadequate English. Some progress has been made in dealing with the problems confronting Aborigines, but much more activity is necessary.

4.60 In its second report, ACOTAFE summarised the issues associated with access to TAFE in the following words:

> The problem of access to TAFE is real. Some of the barriers are erected by TAFE itself for reasons of tradition, conservatism, or financial stringency; others exist within the individual or by reason of his personal circumstances. Contemporary society, faced with increasingly large and monolithic institutions, is placing more importance on individual self-realisation and development. Educational philosophy should reflect this realisation of the importance of the individual. The shift in emphasis means in TAFE less concentration on the needs of industry and more on the needs of the individual, demonstrated in all aspects of TAFE ranging from the physical facilities provided, the courses that are offered, and the attitude to the teaching-learning experience. Overall, this is not so much a matter of funds, but a change in the attitudes of TAFE administrators, teachers and support staff.

Course Planning

4.61 TAFE authorities have customarily been very responsive to demands from client groups in planning and introducing courses. Indeed, as mentioned earlier, this is the most common way for new courses to be introduced. While this approach has led to a very wide range of offerings it has also created some imbalances in the programs of individual institutions, some over-extending of resources and a lack of coherence and articulation between the various elements within programs. Paradoxically, some TAFE courses are not closely related to the labour market they are designed to serve and little effective liaison between TAFE authorities and those concerned with manpower and employment policies occurs.

4.62 The general practice in TAFE when new courses are to be planned or when revisions to existing courses become necessary is for the work to be carried out by head office personnel assisted by teachers seconded on a full-time or part-time basis and advised by committees of experts usually drawn from industry and unions. In the past it has been uncommon for such teams to have the services of educational psychologists or curriculum planning specialists. The quality of the advisory committees has been variable and in many instances their members are out of touch with current industrial needs or represent narrow sectional interests.

4.63 The consequences of this approach to course planning and curriculum development has been a somewhat uncritical acceptance of interstate and overseas models. Many syllabuses consist of little more than an itemisation of the topics to be taught and are rarely informed by discussions of underlying concepts or appropriate methodologies. Until recently very little analysis of the precise training and educational needs of specific occupations has occurred as part of the course planning process.

4.64 The end products of such processes have been narrow in concept and almost entirely skill based. Such curricula have provided little in the way of transferable skills for those obliged to change specialisations as a result of technological change, and they have shown little concern for the individual's development.

4.65 These approaches are clearly inadequate to meet the emerging needs of TAFE as have been identified by ACOTAFE. The proposed new developments in the provision of more comprehensive linking and preparatory courses, the introduction of a wider range of full-time courses, the very nature of post-school education having its major emphasis on preparation for technological change, unlimited access and recurrent education would remain unattainable ideals unless major changes in the course planning and curriculum development processes of TAFE also occur.

4.66 The second ACOTAFE report discussed approaches to overcome the current defects. It stressed the need for more professional expertise in TAFE curriculum development processes and in research activities associated with these. It suggested major curriculum development projects as models upon which new approaches in TAFE could be based. Such projects are characterised by a substantial full-time commitment of staff, the employment of interdisciplinary teams of specialists and experts and the use of formulative and summative evaluation processes. The report also advocated student and teacher participation wherever possible and envisaged the devolution of responsibility for the design of specific course units in individual institutions, along the lines proposed by the Technician Education Council in the UK.

4.67 Underlining the importance attached to developments in curriculum is the fact that of a total of $12.5m approved for recurrent purposes for TAFE for the period July 1975 to December 1976, over $2m has been set aside for curriculum research and development activities.

Staffing and Teaching in Technical and Further Education

4.68 Statistics contained in the second ACOTAFE report provide details on the scope and extent of the teaching effort in TAFE in the Australian States. They show that over 6.5 million hours were devoted to instruction in 1974, the most recent year for which information is available. Forty two per cent of this effort was spent on courses in the trades stream and 26 per cent on the para-professional stream. Average annual teaching hours per enrolment varied from 27 in the professional stream to a little over 3 in adult education; in the para-professional and trades streams the averages were 12 hours and 23 hours respectively. There were 6,604 full-time teachers in TAFE institutions in 1974. Part-time teachers where numbers cannot be determined contributed almost 38 per cent of the total teaching effort in 1974.

4.69 This high utilisation of part-time staff is traditional in TAFE and has a number of advantages. It enables TAFE institutions to maintain contact with industry and commerce from which areas many part-time teachers are drawn. It provides institutions with a capacity to offer extensive programs outside normal working hours which is critical for the current predominantly part-time nature of TAFE's student population. However, many part-time teachers are untrained and may be lacking in commitment to teaching as a career. Most TAFE authorities are adopting measures to reduce the proportion of part-time members in the TAFE teaching force. Current projections indicate that full-time teachers will have a four per cent greater share of the total teaching effort by 1978.

4.70 In 1970 there were about 3,800 full-time equivalent non-teaching staff in Australian TAFE institutions and about 900 full time equivalents in head office staff of TAFE authorities. Fourteen per cent of non-teaching staff and 11 per cent of head office staff were part-time. Apart from NSW there were only twenty people engaged in planning and forward programming in TAFE head offices. Support staff in TAFE institutions is critically low in libraries, educational services, student counselling and related services.

4.71 ACOTAFE maintained that the many years of inadequate resources experienced by TAFE have led to generally low expectations amongst teachers and to a failure to apply critical analysis to TAFE practice, particularly teaching and learning. As mentioned earlier, this has led to a continuation of traditional approaches to instruction and a lack of familiarity with modern instructional approaches including the use of individualised learning programs.

4.72 If the new initiatives in TAFE envisaged in the reports of ACOTAFE are to succeed, high quality flexible teaching staff is essential. Staff development programs therefore become a matter of the highest priority. The urgency of this need is recognised by all agencies involved and several States have established staff development centres to cater for the needs of both teaching and administrative staff and programs are being developed to meet the needs of each staff category. The second ACOTAFE report stressed the wide range of activities necessary to overcome the neglect and omissions which have occurred: in-service training of non-teaching professional staff such

as librarians, counsellors and administrators; management training; varied forms of in-service training using block release and residential arrangements and emphasising new concepts in TAFE as well as course content and instructional methods; staff participation in action based research; and teacher exchange programs.

4.73 Between the commencement in July 1974 of the programs recommended by ACOTAFE and the end of 1976, $3.3m will have been allocated by the Commonwealth to assist the States with the running costs connected with upgraded staff development programs.

Apprenticeship and Trade Training

4.74 The importance of trade training in TAFE programs was indicated earlier in the chapter. In 1974, 21 per cent of all enrolments were in the trades stream. Students under 19 years comprised 65 per cent of all trades stream enrolments indicating the pre-eminence of this field as an option for school leavers. Forty-two per cent of the total teaching effort in TAFE was devoted to courses in the trades stream.

4.75 Although the trades stream contains a number of refresher and retraining courses for qualified tradesmen, the majority of programs is designed to provide initial trade qualifications. In almost all instances, students undertaking such courses in the trades stream are apprentices since apprenticeship is the normal (and, in most cases, the only (legal)) means of obtaining entry to the trades and crafts. There are, of course, some people employed as tradesmen who do not have formal trade qualifications and the problems confronting them in gaining access to TAFE courses have been touched on previously. All States except SA have regulations prohibiting the employment of minors in apprenticeship trades except as apprentices or probationers. In SA some awards permit unapprenticed juniors to be employed at specified wage rates.

4.76 A document 'Essential Features of the Australian Apprenticeship System' released by the Department of Employment and Industrial Relations in December 1975 reports that in June 1975 about 130,000 apprentices were estimated to be in training in Australia. About the same number were in training in the previous year. The numbers for the last two years represent an increase of about 13 per cent over the previous two years. About 35,000 were new entrants to apprenticeship in 1974-75. In 1973-74 there were almost 42,000 new entrants and prior to that numbers had fluctuated between 28,000 and 35,000. The reason for the rapid rise in 1973-74 is discussed below. As noted previously, the metals trade and building trade group attract the largest number of apprentices with 37 per cent and 18 per cent respectively. Since 1968-69 over 20,000 apprentices have completed their apprenticeships annually, the largest number being about 28,000 in 1974-75. Between 5,000-6,000 apprentices have withdrawn from apprenticeship annually over the last five years, the most common reasons being misconduct, loss of interest or incapacity (i.e. death, illness or injury).

4.77 In most States the minimum age for apprenticeship is 15

years and a maximum age for the completion of training is prescribed at 23 years in two States. In the past, few apprenticeships were commenced after the age of 18 years and while this is probably still true, the average age at which young people commence apprenticeship is increasing. A study of first year enrolments in trade courses in 1972 in NSW and Victoria showed that at 1 January of that year 20 per cent were under 16 years but 40 per cent were 16, and 20 per cent 17 years.

4.78 The customary arrangement for apprenticeship in Australia is the indenture which is a contract binding the apprentice for a prescribed period to a particular employer who undertakes to teach him the trade or craft. Systems of apprenticeship vary in Australian States and Territories but all are governed by appropriate legislation and industrial awards. A number of features is common to all systems. Only employers approved by the State or Territory apprenticeship authority may employ young people as apprentices; employers must notify the authority of their intention to employ an apprentice. It is usual for a three months, probationary period to be served before indentures are signed. Indentures may be cancelled with approval of the apprenticeship authority. Apprentices are often formally advised of the technical training requirements associated with their apprenticeship by the relevant TAFE authority.

4.79 Responsibility for ensuring that the provisions of legislation relating to apprenticeship are carried out rests with statutory bodies variously styled as industrial training or apprenticeship councils, commissions or boards. These bodies are usually advised by apprenticeship committees for each trade or group of trades and have expert staff to oversight the conditions of apprenticeship and the progress of individual apprentices. Apprenticeship authorities also have responsibility for promoting apprenticeship, for liaison with TAFE authorities on trade training and for advising governments on matters relating to apprenticeship. The Australian Apprenticeship Advisory Council comprises representatives of apprenticeship, TAFE and employment authorities from each State and Territory and is chaired by the head of the Commonwealth Department of Employment and Industrial Relations. This Department also provides the secretariat for the Committee. The Committee considers and makes recommendations on all aspects of apprenticeship other than wage and industrial matters, conducts research into matters affecting apprenticeship, disseminates information and promotes apprenticeship.

4.80 The normal maximum duration of apprenticeship throughout Australia is four years, though in some instances this is extended to five. Credits reducing the term of apprenticeship by up to a year are available in most States, though not always in every trade. Such credits are granted on the basis of the apprentice's educational qualifications, his on-job performance and his willingness to undertake a period of intensive continuous training.

4.81 Minimum educational standards for entry to apprenticeship vary between States and trades. Generally, the completion of three years of secondary education is required but several trades specify the completion of four years and passes in particular subjects such as mathematics, trade or technical drawing, and science. As the number of

school leavers who have completed four years of secondary education prior to seeking apprenticeship increases, it is likely, in present circumstances, that the minimum standards will continue to rise.

4.82 Apprenticeship awards throughout Australia make attendance at specified trade classes obligatory for apprentices. Where classes are not available (e.g. for country apprentices), attendance at block release training programs or correspondence lessons, or a combination of both is required. Legislation governing apprenticeship usually provides for a specified period of release from work for apprentices to undertake trade training. The provisions vary but commonly allow for eight hours a week or for a specified number of working days for block release. The provisions permit considerable variety and flexibility in arrangements for trade training by TAFE authorities.

4.83 The content and structure of trade courses provided for apprenticeship are normally the responsibility of the TAFE authority which collaborates with trade advisory committees of the apprenticeship authority. In Victoria the Industrial Training Commission (the apprenticeship authority) has this responsibility. Most apprenticeship authorities require advice from TAFE authorities on the progress of apprentices in trade courses but satisfactory completion of such courses is not mandatory in all States for the successful completion of apprenticeship.

4.84 Despite widespread public support in Australia for the apprenticeship system as the basis for training tradesmen there is much current criticism of its operation and effectiveness.

4.85 The subsidy paid to encourage employers to take on more apprentices under the National Apprenticeship Assistance Scheme (NAAS) appeared to have succeeded in 1973-74 when the intake rose by 29 per cent over the previous year. Indeed, employer response was so favourable that TAFE institutions generally were under pressure to accommodate the increased numbers seeking trade training and one State was unable to provide places for almost 1,000 apprentices. However, despite an increase in the subsidy from January 1975, apprentice intakes for 1975-76 fell by almost 17 per cent over the previous year.

4.86 Since these extreme fluctuations have occurred only during the last two years no generalisations from them are possible. However, there are some indications that small and medium sized firms are experiencing difficulties in providing satisfactory practical training for apprentices (partly because of major structural changes within such enterprises) or in absorbing the increasing costs involved in training apprentices despite increased subsidies. In the economic circumstances which prevailed during 1974-75, these difficulties may have become more pronounced. Certainly, numbers of eligible school leavers were unable to obtain apprenticeships at the beginning of 1976.

4.87 This trend is also revealed by the growing demands from employers for technical colleges to provide a greater proportion of the practical training associated with apprenticeship. Technical colleges have responded and are providing workshop-type training in a number of trades. ACOTAFE has suggested that this development calls into question the concept of apprenticeship-in-industry which has been

fundamental in trade training in Australia. It has drawn attention to one of the conclusions in the Report of Australian Tripartite Mission 1968-69: The Training of Skilled Workers in Europe to the effect that neither traditional apprenticeship nor full-time vocational schools are satisfactory means of training skilled workers. This report concluded that the mixed system including an introductory period of full-time training off the job followed by a period of training and experience in industry was the most satisfactory method of training. Little effective action has been taken to date on these and other conclusions of this mission.

4.88 ACOTAFE's observations about current trends suggest that the time could be approaching when such a mixed system might easily be introduced in Australia and the Committee argues the need for formal recognition of this and for the associated planning for the changes which would be involved to be commenced.

4.89 Mention was made earlier in this chapter of the narrowness and the high degree of skill and industry orientation of many TAFE courses. This is nowhere truer than in relation to the trades stream which has also had to carry the greatest share of the burden of low funding in such areas as equipment and facilities, which are often very expensive, and curriculum development. When these disadvantages are coupled with the conservative outlook of many of the bodies advising on trade courses the static condition of trade training becomes explicable. Many of the measures suggested by ACOTAFE are designed to bring about a change in emphasis in TAFE from the needs of industry to the needs of the individual. This change is especially important in the trade training areas where the needs of individuals (because they are usually younger and have no option but to attend courses) should occupy a more central position.

4.90 Members of ACOTAFE were quite clear about the most important development need in the training of apprentices - a substantial period of full-time attendance at technical college. Implications of such a development include a review of the current indenture system (which has become increasingly irrelevant) and the need for greater public support for young people during their attendance at full-time trade courses.

4.91 Both ACOTAFE reports endorsed the call for a major national inquiry into apprenticeship and its contribution to national skilled manpower requirements. The Committee considered that the educational needs of apprentices should receive equal emphasis in such an inquiry. To date, no action to mount such an inquiry has been taken.

The Training of Para-Professionals

4.92 Courses offered in the para-professional stream in TAFE are designed for technician, semi-professional, or middle-level occupations. They are the occupations falling between the trades and the professions requiring more knowledge of general principles than the former but less than the latter. Examples include technicians in science, engineering, architecture, agriculture, medicine, dentistry and similar callings. Certain aspects of accountancy management and

company administration provide opportunities for trained para-professional personnel. Child care centres and related community services also give rise to the employment of para-professionals and are providing increased opportunities for women to participate in the work force at the middle level.

4.93 The para-professional stream is the largest in TAFE and appears to have the potential for more rapid growth than any other sector. It is a particularly important avenue of further study for school leavers. About half the courses in the para-professional stream for which entry requirements are specified require satisfactory completion of four years' secondary school for admission; a further quarter require five years. While full-time courses in the para-professional stream are increasing in number, most courses are available on a four years, part-time basis allowing for the combination of full-time and part-time work and part-time study favoured (in present circumstances) by many employers and, of necessity, employees.

4.94 Courses in the para-professional stream accounted for 26 per cent of the total teaching effort in TAFE in 1974. The possible high incidence of failure and withdrawal in TAFE courses reported earlier is probably most pronounced in the para-professional stream. The predominance of part-time teachers in it might be one contributory factor.

4.95 As in most other countries, the majority of para-professional courses in Australia have been developed in the last quarter of a century. ACOTAFE drew attention to this growth and saw the para-professional stream as the area most affected by social change as reflected in job opportunities. The forecast of the Committee was that 'given appropriate stimulus, demand at this educational level as a whole could grow more rapidly than most other levels combined'. This would suggest that developments in this area could affect the future of TAFE more than any other impending changes.

4.96 The Committee apparently saw the para-professional growth as deriving equally from further technological development and from the growth of community services (e.g. education, social welfare). It is from this same growth that many of the activities of the advanced education sector have arisen. Many of the higher courses in technical colleges were transferred to the advanced education sector, in some States in particular, during the late 1960s. The existence of apparently similar middle-level courses at both CAEs and technical colleges raises questions of possible duplication of effort. But given that some degree of overlapping is not undesirable and can, in fact, lead to more varied programs, certificate level para-professional courses are a proper concern of TAFE institutions. The rationalisation of the areas of overlap and common activity between TAFE and advanced education authorities is an issue of current concern to TAFE authorities.

4.97 Despite the rapid expansion of para-professional courses and the claims made about TAFE's responsiveness to new needs, the major emphasis in the offerings in this stream is in business and engineering fields. Perhaps this signifies that only these particular sections of

industry have formulated their demands with enough precision and insistence to have new courses mounted for them and that the technical colleges, having found reliable industrial areas for which to cater, designed more and more courses within these areas rather than venturing into new fields elsewhere. If so, this would seem to be the kind of approach referred to in ACOTAFE's first report when it noted that most college administrations wait for a demand for courses to arise spontaneously before making provision for them.

4.98 Because of this approach there could well be existing needs for para-professional courses which TAFE has not recognised. ACOTAFE considers that preparation for para-professional occupations in manufacturing, transport and communication, and building and construction deserve special attention by TAFE authorities. It also suggests that training for para-professional occupations in other fields, especially education, libraries, community and health services needs closer investigation.

4.99 Although there is an obligation for TAFE to devise more effective methods of identifying new para-professional course needs, there must be some risk involved in mounting any new courses promptly on the tentative indication of a need or as a result of pressure from activist groups. This is perhaps particularly so where the courses involved concern community services. Government supported schemes in new and experimental areas of community service are sensitive to variations in the economic climate. Even if severe cutbacks to government programs are infrequent, fluctuations in the level of support for such activities could pose problems if training programs in such areas are introduced hastily. In one or two instances, these difficulties have already arisen.

4.100 ACOTAFE draws attention to the need for TAFE offerings in the para-professional stream, as elsewhere to be publicised more widely. The availability of vocational education in the para-professional stream should be widely advertised so that the career opportunities become much better known than at present and show young people at least an alternative to the professional stream of education. Because it is a fast-developing and relatively unfamiliar stream of education public ignorance of its range of offerings is likely to be particularly widespread.

THE AUSTRALIAN COMMITTEE ON TECHNICAL AND FURTHER EDUCATION

4.101 In 1973 the Commonwealth Government decided to undertake a continuing commitment to assist TAFE. Prior to this complaints about the depressed condition of TAFE, and the discrimination involved in the Commonwealth's comparative neglect of it had been widespread. TAFE had a low status image which still exists and is still seen to be one of its main disadvantages.

4.102 In April 1973 the appointment of the Australian Committee on Technical and Further Education (ACOTAFE) was announced. As outlined in Chapter 1 the Committee's function was broadly to inform and advise on the development of TAFE in Australia, in government sponsored, post-secondary institutions outside the university and advanced education areas. Grants for training within industry were outside its province.

4.103 It was also asked to take into account:

- the promotion of the vigorous and well-balanced development of TAFE throughout Australia
- the overall manpower policy and national and local occupational requirements
- the emerging needs of industry, commerce and governments as they adjust to technological, economic and social change
- community attitudes and the needs and aspirations of individuals seeking to undertake courses in TAFE
- the optimum use of resources.

4.104 The Committee submitted its first report in April 1974, after having conducted a comprehensive questionnaire survey of technical college type institutions and receiving more than two hundred submissions from organisations and individuals actively involved in TAFE. The report set out and examined a mass of information about TAFE not previously available; a wide range of current planning and opinion in government and non-government quarters on TAFE matters; a set of financial recommendations for the period from July 1974 to December 1975; recommendations for the establishment of a Technical and Further Education Commission; and the Committee's discussion of a host of issues uncovered by its inquiries.

4.105 The Committee's financial recommendations required Commonwealth expenditure of nearly $105m over an eighteen month period on a program of States grants for recurrent and capital purposes, some of them specified. The Commonwealth Government accepted most of the recommendations and later a commitment to provide further funds against cost escalation. The States' recurrent provision from State resources for the year 1973-74 was, very broadly, about four times the annual recurrent support for technical education which the Commonwealth has provided up to the end of 1976 in its first period of financial assistance for TAFE. It was ACOTAFE's understanding, and the Commonwealth Government endorsed the view, that this order of Commonwealth support was necessary in addition to the State level of assistance to ensure the required improvement in TAFE. It is intended that the States will at least maintain present levels of assistance to TAFE.

4.106 Though much of the material may need revision, the first ACOTAFE report began the compilation of national data on TAFE. The report's very contents betray some of the important gaps in knowledge about TAFE, for example the absence of information about academic success and failure among TAFE students. The report placed heavy emphasis therefore upon the need for research on TAFE and into some of its basic processes (e.g. the efficiency of part-time teaching).

4.107 The central theme of the Report is the need for unrestricted access to government-maintained TAFE: or, alternatively stated, the removal of barriers and the encouragement of TAFE entry for

all adults. For the Committee this is at once a plea for recurrent education in TAFE (regardless of minimum formal requirements, or current employment status) and a demand that the individual's welfare and development be made the central concern of TAFE, thus making it a genuine part of the educational system and not solely a training area for employment. The Committee agreed, however, that the development of the potential of people in TAFE should be within the realities of the job opportunities by means of which they are aiming to use their education to earn a livelihood.

4.108 The Committee's second report was presented in May 1975. The Committee had for this report wider terms of reference: it had permission to look also at the TAFE activities of CAEs, at non-government technical colleges, and at the non-government adult education sector as long as profit-making institutions were not involved.

4.109 Matters emphasised by the first report which the Committee examined at greater length and which have been mentioned previously in this chapter included barriers to access in TAFE and possible remedies; possible new procedures in curriculum development; examination of trade course problems and further proposals for the future of apprenticeship education; a substantially new set of thoughts about the growing para-professional courses and their desirable development; and a proposal for a register of national course equivalences and for criteria of course accreditation, together with a warning about threats to free access implicit in accreditation. The report examined the concept of recurrent education, to which the first report frequently referred, explored its possibilites and difficulties and measured current practices and developments in Australia.

4.110 The Report also examined the needs of the new TAFE territory it had been authorised to cover and made a series of recommendations for financial support. Its analysis of the nature of non-government, non-profit adult education and its important role in Australia may also be noted:

> ... for many people it serves as the most familiar example of recurrent education in practice, although it is only one element, albeit an important element, of a wider provision. The Committee is determined to support adult education in such a way as to avoid disrupting its direction.

THE TECHNICAL AND FURTHER EDUCATION COMMISSION

4.111 On the basis of recommendations in the first ACOTAFE report, the Government introduced legislation to establish a Technical and Further Education Commission (TAFEC) and the Act was passed by Parliament in May 1975.

4.112 This new body complements the Schools Commission, the Universities Commission, and the Commission on Advanced Education, and, in the words of the Minister introducing the legislation, would 'give the long under-developed area of technical and further education the same assurances of skilled and impartial consideration of its needs as

have the areas of primary, secondary and tertiary education'. The Commission is concerned not only with technical education but also adult education in technical colleges, evening classes and classes conducted by adult education organisations such as the Workers Educational Association.

4.113 The most fundamental fact of the existence of TAFEC is that it is a Commonwealth advisory body in an area where the States have now, and are expected to retain, the primary responsibility. It will be the Commission's particular duty to develop productive and harmonious relationships with State authorities, such as are consistent with the underlying constitutional relationships.

4.114 TAFEC's committee structure reflects its main areas of concern. The structure, reviewed in the light of experience during ACOTAFE's operation, is:

- Capital Works Committee
- Population and Manpower Committee
- Learning Resources Committee
  - (a) Staff Development Sub-Committee
  - (b) Curriculum Development Sub-Committee
  - (c) Library Resource Centres Sub-Committee
- Recurrent Education Committee
- Research and Development Sub-Committee
- TAFEC-State Statistics Working Party.

4.115 TAFEC is still a very young body but certain issues have already been brought forward for its attention. The Commonwealth Minister for Education, Senator John Carrick, has spoken of his Government's intention to take particular initiatives to widen TAFE opportunities for all Australians:

> One of the things we will be giving special attention to is assisting the development of external study courses ... Women will be given particular attention. Employers and unions will be consulted on ways to assist women who want to rejoin the workforce to meet with success. Women are very much in need of assistance to obtain satisfying places in the workforce when they return to it after lengthy absences.

4.116 State TAFE Directors and TAFEC representatives have been discussing the question of national accreditation of some TAFE courses. A conference of TAFE officers was arranged to discuss some of the many aspects of the problem of access to TAFE and follow-up action was taken. As a result TAFEC has some substantial material on this subject for its consideration. On the question of access, TAFEC's research and

investigation program includes three projects of relevance, involving inquiries into the TAFE needs of Aborigines; the problem of illiteracy amongst school leavers, apprentices and adults; and the achievements and problems of physically disabled persons who have qualified through TAFE. TAFEC is investigating teacher education requirements in TAFE with the help of a report prepared last year by a Committee on Technical Teacher Education. It should be mentioned also that the Commonwealth Department of Education has been making a national survey of TAFE students, seeking information on personal background, secondary education, current courses and future education and occupational plans. A report on the survey is expected in 1976.

4.117 Many of the particular problems with which TAFEC will of necessity be concerned have been touched on in the course of this chapter. Two or three further matters not previously noted may also be briefly mentioned. TAFEC will no doubt be considering what TAFE can do about one of the questions on which this paper has placed some emphasis - the question of making the young aware of the world of work. ACOTAFE, in its second report, found that many young leavers, having left school, lack both the knowledge and motivation for choosing a job, and likewise lack clear knowledge about what TAFE offers. ACOTAFE believed TAFE could help students both while they were in their final year at school and once they had left. It suggested that TAFE offer 'link' courses to secondary school students during their last year and for those who had left school. The courses would show the variety of vocational streams available and the nature of skills and responsibilities involved in a range of occupations.

4.118 The concept of the community college both as a point of focus for an adult community and as a provider of a host of informal educational experiences for people not usually reached has been discussed for some time in Australia. Recently State and Commonwealth planners of TAFE and CAE facilities have come to feel that in many rural areas one institution could offer a range of tertiary and TAFE services and could best serve local education needs at a variety of levels. In its second report ACOTAFE suggested that technical colleges already often resembled community colleges and with appropriate development could become such institutions. TAFEC has supported pilot studies on the possibilities of developing such institutions in selected non-metropolitan areas.

4.119 ACOTAFE's two reports between them have explored a vast amount of territory and made wide-ranging proposals and recommendations. A major role for TAFEC will be to continue the analysis and investigation of TAFE and to offer further proposals for development. TAFEC is expected to prepare and administer substantial funding programs and develop procedures for accountability and evaluation.

CHAPTER 5 TRANSITION TO TERTIARY STUDY

5.1 This chapter is concerned with the transition of school leavers to tertiary education. After a brief review of the main types of tertiary institutions its main concern is with aspects of access to tertiary education. This includes consideration of: the influence of socio-economic background and sex on attitudes and ability; guidance facilities, and information on courses; entry conditions, variety of course offerings, factors affecting provision of places; and the availability of finance to students. The final sections include a brief discussion of the apparent value of the tertiary experience to students and note some issues of current interest.

TERTIARY EDUCATION PROVISION

5.2 In brief, as discussed in Chapter 3, about 50 per cent of children remain at school after year 10, about 35 per cent remaining to the final secondary year; and about half of this number, 18 per cent, proceed directly to tertiary studies which generally require the successful completion of year 12 for entry.

Types of Tertiary Institutions

5.3 Students continuing from secondary school to post-secondary education have a choice of three main types of institution available to them: universities, colleges of advanced education and technical colleges. Universities and CAEs provide courses leading to the award of recognised diplomas, bachelor degrees and higher degrees. A few institutions provide both technical and CAE courses, as a number of present CAEs developed from technical colleges which had been established many years before CAEs were set up after 1964. A few TAFE institutions have courses which are recognised as of CAE standard.

5.4 Institutions within the TAFE sector were considered in Chapter 4. The establishment of an institution such as the Darwin Community College which provides a variety of post-school courses (technical, adult and leisure-type and tutorials for tertiary courses) is worthy of special note, as are the Film and Television School and the Australian Trade Union Training Authority.

5.5 The degrees awarded by universities and CAEs are usually accepted by employing authorities as being of equal standing, although the institutions differ in their emphasis. The CAEs are more oriented towards vocational and applied studies leading to undergraduate diplomas as well as degrees. The universities have traditionally been a source of skilled professional manpower and provide courses leading to the award of a professionally recognised qualification. However, in a number of faculties there is little or no commitment to the professional preparation of students. The universities provide education in a range of traditional and newer disciplines, whereas CAEs vary from small single-purpose institutions such as agricultural colleges, small or large teachers colleges (incorporated into the CAE system since 1973) to large multi-purpose and/or multi-campus institutions. The universities are more concerned with the preservation, transmission and extension of knowledge by research and

the critical study of society, while the CAEs provide courses to meet the known needs of society and do not provide higher degrees which can be done solely by research. No doctorates are awarded by CAEs. Universities have counterparts throughout the world and are expected to meet the criteria applied to all universities, whereas CAEs belong to a national network and are assessed according to their effectiveness in meeting community needs.

5.6 A brief discussion of the functions of the Universities Commission and the Commission on Advanced Education in funding tertiary institutions is included in Chapter 1 and in the reports of the Commissions. The location of tertiary institutions in Australia is indicated in Diagram 5.1.

University and Advanced Education Growth

5.7 As shown in Table 5.1 enrolments in universities increased five-fold in the last twenty years, from under thirty-one thousand in 1955 to nearly one hundred and fifty thousand in 1975. Population increase contributed less than half of this increase, the larger proportion arising from increased participation in education.

5.8 The annual growth in university enrolments was at its highest in the late 1950s and early 1960s when it averaged over 10 per cent a year. It has levelled off since then to about 5.5 per cent in the period 1970-75. Restrictions in funding imply limited growth in the period 1976-79.

5.9 The growth of CAE enrolments over the 1968-75 period averaged nearly 16 per cent a year, higher than that of university enrolments at their period of greatest expansion. The CAE sector, although developed only in the last twelve years, is enrolling students in numbers approaching those of universities. The Commission on Advanced Education expects some levelling off in demand for places in the coming triennium and restrictions in funding will reduce growth considerably.

5.10 A rough indication of the growth in participation in tertiary education is given by expressing the undergraduate population as a proportion of the 17 to 22 year old population. This proportion has grown from about 11 per cent in 1968 (the first year for which reliable CAE statistics are available) to about 18 per cent by 1975. Some of the implications of this growth were considered briefly in Chapter 3.

Differences between States

5.11 The provision of tertiary education has not been uniform across States. Victoria, for instance, largely for historical reasons, has more CAEs and more places in CAEs in relation to the population than other States. On the other hand, NSW has a higher proportion of the relevant age group in universities. Participation rates (tertiary enrolments as a percentage of the population in the 17 to 22 years age group) in 1975 varied from 12 per cent in Tasmania to over 20 per cent in WA (Table 5.8 of the Universities Commission Sixth Report 1975).

There is, however, some interstate migration of tertiary students. For instance, in 1974 and 1975 the equivalent of 9 per cent of Tasmania's university students attended universities in other States (Post-Secondary Education in Tasmania, 1976, Para 6.7).

TRANSITION TO TERTIARY EDUCATION: ACCESS

5.12 A variety of factors determine whether a school leaver proceeds to tertiary education. These include: the aspirations, expectations and abilities of young people particularly as affected by socio-economic background; the availability to students of information and guidance facilities; the formal conditions of entry to the various institutions; the variety of courses and alternative ways of taking them including part-time and external study; the financial burden of undertaking tertiary study; and the actual availability of places and institutions to students.

Expectations, Abilities, Outcomes

5.13 Few detailed data are available concerning the intentions or actual decisions of final-year secondary students. A recent Regional Colleges study by D S Anderson et al. at the Education Research Unit, Australian National University, provides information on a wide range of aspects of the transition process, and is therefore drawn on extensively below. However, this report has not yet received professional criticism and some of its findings may prove contentious.

5.14 Although the main object of the report by Anderson et al. was to study regional CAEs, for comparative purposes samples were selected from final-year school students, from the catchment areas of selected regional colleges and from metropolitan schools, as well as from second-year CAE students in regional and metropolitan institutions. A follow-up survey of the final-year school students was made to identify those who had in fact entered post-secondary institutions. Parents of the final-year school students in four regions were also surveyed. The findings, therefore, provide information on the attitudes and background of students as they make their transition from secondary study to work or further education.

5.15 The destinations of the 1973 final-year secondary students in the sample were as follows:

	%
Colleges of Advanced Education	33
Universities	22
Technical Colleges	5
Hospital Schools of Nursing	4
Other post-secondary institutions	3
Secondary schools (repeat HSC or similar)	9
No formal education	24
Total	100

5.16 The proportion of the sample of final-year school students proceeding to tertiary study is very close to that for Australia as a

whole although the relative position of universities and CAEs is reversed. It is noteworthy that only a quarter of the students did not immediately continue formal study.

5.17 The regional colleges study found that students' own expectations in the final school year were the best predictor of their activities in the following year. Examination results were the next best predictor and differentiated between students who proceeded to university, CAE, technical college or discontinued study.

5.18 There was also a difference between the general and specific scholastic abilities of CAE and university entrants, although there was overlap between the two types of institutions particularly the newer universities and the CAEs. Of the sample of second-year CAE students, 70 per cent reported having qualified for entry to a university in their state, and 66 per cent of the year 12 school students who entered a CAE made similar claims.

5.19 A variety of other factors also distinguished CAE entrants from university entrants. Socio-economic status had only a slight influence on the transition of year 12 students to some form of tertiary education - its influence is largely in determining retention to the final school year. However, it is evidently a factor influencing a preference for university rather than CAE entry and on the type of course taken. Similarly, a proportionately large number of students from the non-government sector, particularly the non-catholic sector, favour university to CAE entry.

5.20 The regional colleges study also showed that year 12 school students who stated a preference for a university were usually taking their subjects at a more advanced level (where choice in level was available); saw themselves as being more able at their schoolwork regardless of the subject being studied; had a greater scientific orientation; were more ready to leave home; and showed greater confidence in their ability to do further study, especially in the more academic subjects. Students with a stated preference for CAEs tended to be more extrinsically motivated and had more definite vocational plans. If these characteristics were too pronounced students were likely to drop out of further education altogether. Students entering multi-purpose CAEs were more likely to want to combine work with study.

5.21 A higher proportion of girls than boys in their final school year expected to continue to tertiary study. This study and others discussed in chapter 3 suggest that girls underestimated their ability more than boys; their actual matriculation performance was superior to boys. Girls were less likely to repeat the matriculation year, to plan part-time study or to take a year off from study. The pattern of girls' interests and motivations made it more likely that they will enter teacher education institutions in the CAE sector rather than universities. Girls in CAEs were on average from higher socio-economic status than boys, and girls generally entered tertiary education younger than boys.

5.22 Students of migrant origin who reach year 12 are as likely as their Australian counterparts to continue to tertiary education. Studies such as Professor Taft's show that migrants from non-English

speaking origins have higher aspirations and remain at school longer than Australian-born students.

5.23 Very few Aboriginal students complete secondary school and continue to further studies. The plight of Aborigines has been referred to in paragraph 2.85 above. Statistics from the 1971 census suggest that the average Australian child is about ten times as likely to remain at school beyond year 9 than an Aboriginal child.

5.24 Radford and Wilkes survey of school leavers as noted in Chapter 3 indicated a difference between metropolitan and non-metropolitan school students in proceeding to further study. However, the regional colleges study suggests that the difference between final-year students is small, indicating that the effect is mainly lower in secondary school.

5.25 The year 12 students in the regional colleges survey were asked 'What are the most important goals you hope to achieve in the next five years?' The dominant goal of students at the point of transition was simply to gain further education presumably in recognition of the need to obtain qualifications for a satisfactory occupation. There was a marked difference between those expressing preference for a university and those for a CAE in the emphasis they give to this goal.

5.26 Information was also sought from the school students, from their parents and from students at CAEs on their reasons for continuing education. Items concerned with a general or liberal education were endorsed, together with the desire to train for a job. A noticeable sex difference in the item 'To Learn More about People' indicates that girls had significantly different goals from boys as noted in earlier chapters.

5.27 Students also chose institutions for a variety of other reasons - for providing practical rather than theoretical courses; for having high academic standards; where students were active in political and social movements; and where friends were going.

Information and Guidance

5.28 As Australia has about a hundred recognised tertiary institutions as well as other bodies offering a wide range of post-school courses, intending entrants obviously need information if they are to make a realistic choice of institution and course. The universities and CAEs produce booklets on their own courses and facilities as well as conducting open-days when students, parents and others are encouraged to visit institutions to obtain an idea of their activities. In addition, members of universities and CAE staffs visit schools to publicise their institution's programs and provide information to students on their choice of courses. Some institutions have special schools units or liaison officers to do this work. Tertiary institutions also have vocational and counselling units which give information to students on choice of course, choice of vocation, and assistance if the student is experiencing educational or personal difficulties.

5.29 A number of publications provide directory-type information on tertiary courses for intending students. For example, the Commonwealth Department of Education produces Directory of Tertiary Courses which lists alphabetically and indexes the undergraduate and postgraduate courses available. Various education authorities in the States publish handbooks on courses available.

5.30 However, as noted in Chapters 2 and 3 above, the effectiveness of vocational information and guidance might not be high. Investigators have reported that many students did not have clear ideas of the courses available to them and that they were especially ignorant of the role of CAEs. This may in part be due to the preponderance of university over CAE educated teachers in secondary schools. University and CAE students in the regional colleges study did not see careers advisers or vocational guidance officers as playing an influential role in their career choices. Interviewers of delegates attending the January 1974 Australian Union of Students Annual Council in Canberra obtained opinions as to the effectiveness of various counselling services. In general, students said these services were non-existent or very inadequate.

5.31 Nevertheless, a study conducted on transition to tertiary education in SA found that 37 per cent of both those who continued to further study and those who did not had received vocational guidance, and that about half of each group had changed their plans as a result of such counselling. These results indicate some importance for counselling on student expectations.

Entry to Tertiary Education

5.32 Tertiary institutions in Australia set minimum academic admission requirements usually based on the final school examination in the relevant State. In addition to general requirements for admission, higher standards are required for entry to certain courses, or entrants may be required to have qualifications in certain subjects or in certain patterns of subjects.

5.33 Universities have traditionally made provision in their regulations for the admission of students who only partially fulfil requirements, but in the past these have been few in number. There has been concern that many able students for various reasons do not complete secondary school or do not perform well in the examination. As a result, various tertiary institutions have developed more flexible schemes for admission. For example, the University of Queensland and the University of New England have for a number of years had liberal entry arrangements. Other universities have early admission schemes whereby students are offered tertiary places on the basis of school reports before they have obtained their HSC results.

5.34 At Monash University, for the last 10 per cent of places in each faculty, consideration is given to educational disadvantages which might have affected performance in the HSC examination e.g. English not being the mother tongue, being of Aboriginal or part-Aboriginal descent, having taken two or more subjects by correspondence, low family socio-economic status and relevant school deficiencies such as

staff or equipment shortages. At the University of New South Wales persons of Aboriginal descent may be admitted to bachelor courses whether or not they are formally matriculated and without the need to compete for a place. An assessment of the suitability of the applicants is made by the student counselling unit and members of this unit together with members of the teaching staff give continuing help to students so admitted.

5.35 With the move towards greater flexibility in entrance requirements, the onus lies on institutions to provide bridging and preparatory courses for students lacking the usual background. Institutions may provide summer courses or in a number of cases they have adapted their courses so that they may be taken by students who lack previous knowledge of the subject.

5.36 Despite moves by tertiary institutions towards more flexible admissions policies, the numbers admitted without the usual qualifications are a very small proportion of total admissions (see Table 5.3 for university figures).

5.37 Whether emphasis should be given to an entrance qualification as a predictor of tertiary success has been recently debated in Australian educational circles. Some argue that students should have the freedom to fail and that anyone who desires tertiary education should have the opportunity to try his chances. On the other hand the public cost of tertiary education has engendered concern that students should be subject to some test which enhances the probability of success, thus avoiding wastage of resources.

5.38 Doubts about the validity of the final school examination as a predictor of tertiary success were among the reasons leading States to look for substitutes. There has also been concern at the influence of the final school examination on secondary school curricula as discussed in Chapter 2. Queensland, the first to abolish final school examinations, has substituted moderated internal teacher assessment of work done over four semesters (two years) to obtain a senior points score. To obtain a TE (Tertiary Entrance) score the senior points score is modified by ASAT (Australian Scholastic Aptitude Test) which was developed by the Australian Council for Educational Research. Some tertiary institutions in Queensland use the TE score, others take into consideration the senior points score as well.

5.39 ASAT is designed to assess aptitude for tertiary level studies by measuring general verbal, numerical and related skills and to be independent of knowledge gained by studying specific subjects. However, it has not proved a particularly good predictor of tertiary results. Also it is possibly biased in favour of the abilities of science-type students and against arts-type students. As males generally do better in science-type subjects, a bias could arise against girls who do better in English and the humanities. On the other hand, the senior points scores, derived from teacher assessments, have been found to be quite good predictors of tertiary success.

5.40 Although the traditional pattern of transition to tertiary education is immediately from school, universities have always given consideration to students seeking to defer commencement of university

studies. Generally, the number of entrants seeking deferment has been small. However, in recent years universities have adopted a more liberal attitude towards granting deferrals for at least one year. In 1974 about 2,500 recent school leavers applied for admission to universities on a deferred basis and about 80 per cent were successful in their application. Little is known about the general characteristics and eventual success rates of students obtaining deferrals, although it is usually assumed that the practice is of benefit both to students and the institutions. The regional colleges study indicated that fewer than half of the second-year college sample preferred the usual pattern of transition, although most of them had proceeded directly to further study.

Entry to Particular Courses and Institutions

5.41 Not all those who have obtained the specified prerequisites are able to obtain entry to courses or institutions of their first choice as, where quotas are imposed, institutions accept only those applicants who score above a given cut-off point in the HSC examination or its equivalent. However, it is probably true that nearly all formally qualified students who wish to enter tertiary education (under current conditions of student assistance and future prospects for graduates) are able to enter a tertiary course somewhere.

5.42 Student applications for particular courses, such as medicine, and for particular institutions (the older universities) far exceed the number of places made available. It is necessary every year for selection to be made among the applicants. In Sydney, Melbourne, Adelaide and Perth the bulk of this selection process is handled on behalf of a number of tertiary institutions in the state by admissions centres. Where such centres do not exist or where institutions are not participants in them, admissions are managed by the individual institutions.

5.43 Subject interests for matriculation students in the regional colleges study are shown in Table 5.4 and this pattern may be compared to actual subject enrolments in universities and CAEs (Tables 5.5 and 5.6) over the past few years. Tables 5.7 and 5.8 show the enrolments of girls in various tertiary fields of study and indicate their marked preference for the humanities and education over the technologies, although they are increasingly entering the professional courses. Student enrolments in general show a continuing trend towards interests which have been characteristic of girls, that is, away from the technologies and physical sciences towards the biological and social sciences and the liberal arts. As tertiary places in these latter disciplines are less expensive to provide than places in professional courses, student demand is easier to accommodate, but in a climate of economic restraint, pressure on student places of all kinds is likely to increase.

5.44 As students must compete to enter institutions and courses of their first choice, a certain proportion is likely to be disappointed in this aim. Examination results in the final secondary year necessitate changes in plans for a number of students.

5.45 Although it is difficult to assess the overall movement as

a result of examination results, findings from the regional colleges study give some indication. It was found that those moving from a university preference to a CAE outnumbered those moving in the opposite direction by about three to one and had HSC results very similar to those who had originally preferred CAEs. The smaller number who changed in favour of university entrance scored noticeably higher in the HSC examination than the average CAE entrant. There was about as much movement within the CAE sector, a considerable number of students changing from a teachers college preference to attendance at a multi-purpose CAE after gaining relatively low marks at the HSC examination.

5.46 In the follow-up study of final-year students in the regional colleges study most said they had been able to enter the course of their choice. Only 132 of 1,620 CAE entrants were unable to enter courses of their choice in comparison to 136 of 1,013 university entrants. It seems then that only a small proportion of qualified applicants are denied a place in a tertiary institution, although some would not be accepted by the institution of their first choice and some would not be able to take up the course of their first preference.

Flexibility in Courses

5.47 Participation in post-secondary courses is facilitated by different methods of provision of courses, that is, by giving courses on an internal part-time or evening basis or externally by correspondence. Table 5.9 shows the distribution of full-time, part-time and external students in universities and CAEs. While the majority of students were studying on a full-time basis in 1974, 37 per cent of all students were engaged in part-time or external study. In recent years there has been a decline in the proportion of students studying part-time and a slight increase in the proportion of external students, the growth coming from the CAE sector, while the proportion of external students in the university sector has diminished.

5.48 The traditional pattern of transition is directly to full-time study from school (as shown in Table 3.2 above) but a fair proportion of matriculants in the regional colleges study, particularly males and students in multi-purpose CAEs, would prefer to study part-time. In the years immediately after the Second World War most universities made extensive provision for part-time study by offering lectures, particularly in the humanities and social sciences, in the late afternoon and evening. An indication of the extent to which evening classes are available in universities can be obtained from Table 5.10. In three universities more than 30 per cent of lectures and tutorials is available after 5.00 p.m. while in four universities less than 10 per cent of classes are held in the evening. The proportions for laboratory classes are generally lower.

5.49 Part-time students are more likely to drop out of their courses than full-time students, but for those who do take the examinations the pass rate is comparable to, and in some cases better than, that for full-time students (See Table 5.11). The difficulties facing part-time students have led some universities to provide special assistance. At the Australian National University the position of

Adviser (Part-time Studies) was created in 1973 in the University's Counselling Service. The duties of the adviser are to provide advice, assistance and information to part-time and intending part-time students, as well as undertaking liaison, research and investigational work. The Adviser also explores with employers and the University the possibilities of improving facilities and making provisions enabling part-time students to study more effectively. A similar role is taken by the Director of the Part-time Studies Centre at Macquarie University.

5.50 Correspondence or external courses were offered at 8 universities and 28 CAEs in 1974. Of these only 3 universities and 4 CAEs enrolled over 500 students. Although participation in off-campus education in Australia is higher on a population basis than in the UK, opportunities for external studies are not evenly distributed throughout the continent. Table 5.12 shows that NSW and Queensland between them account for more than 70 per of all of external enrolments and 90 per cent of university external enrolments.

5.51 Entry to external courses is usually on the same criteria as for internal courses. Courses available are mainly in the humanities. As with part-time students the drop-out rates for external students is high, particularly in the first year, although the success rate for external students who take their examinations compares favourably to full-time students. The large majority of external students in the universities at least is over 23 years of age, and have probably engaged in work or other study prior to enrolment. Information on the occupations of external students indicates that teachers make up the largest group, their proportion being higher than that for the British Open University. Table 5.13 sets out the occupations of external students at the University of Queensland. As with the British Open University professionals studying for a further qualification represent a significant proportion, while the proportion engaged in home duties is lower than for the Open University.

5.52 In 1973 the then Australian Minister for Education announced that a committee would be appointed to advise the Universities Commission on open university-type education. The final report of this Committee in December 1974 has been made available to the OECD examiners and only its main recommendations are listed here:

1. A National Institute of Open Tertiary Education (NIOTE) should be established in 1975 as a statutory body with the general objective of expanding opportunities in tertiary education for all sections of the community;

2. A network of university and college off-campus courses and open educational practices should be developed from a number of existing or new institutions which already have, or are willing to assume, a major commitment for such work recommended by NIOTE after consultation with the appropriate authorities;

3. The Universities Commission and the Commission on Advanced Education should investigate whether additional assistance may be necessary for universities and CAEs for the support of educational services to part-time and external students and the Commissions should provide for significantly increased external enrolments in a limited number of universities and CAEs within the 1976-78 triennium.

Financial stringency delayed the implementation of new initiatives in 1976 and the report remains under consideration.

Transfers

5.53 Tertiary education may be made more open by ease of transfer between courses and between institutions for students who find their first choice of course inappropriate. At present, transfers are possible but do not involve great numbers of students. The institution or faculty to which a student transfers usually decides on the amount of credit a student will be given for work he has done elsewhere. Both the tertiary commissions support transfer as increasing opportunities for students. The institutions are the final arbiters, and, as they probably have difficulty assessing the value of courses done elsewhere, they tend to be cautious in their assessments.

Teaching Techniques

5.54 A further way of opening up educational opportunites is to individualise instruction to have it more closely meet the varying needs of students. An increasing number of institutions have centres or units concerned with the investigation of the appropriate methods of teaching and examining tertiary students and with providing instruction and assistance to lecturers and tutors. Although a number of projects are concerned with individualised instruction and self-paced learning, the chief method of teaching remains the lecture and tutorial method.

Student Assistance

5.55 Participation in tertiary education may be difficult for some students because of the costs, which comprise earnings foregone and tuition costs. Students may bear part of the costs themselves through reduced disposable income, receive support from their families and be assisted by governments and private institutions. The intention here is to comment on the availability of finance to students and its impact on entry to, and survival in, tertiary education.

5.56 The major forms of government assistance are in the form of payment of fees - or their abolition - and living allowances in the form of grants. The most extensive form of assistance is the Commonwealth Tertiary Education Assistance Scheme (TEAS) introduced in 1974. At the same time fees were abolished for approved courses, although they might be re-introduced for second and higher degreees, apart from recognised combined courses, in 1977. TEAS in effect represents an extension to virtually all full-time students, other than those under contract to a particular employer, of the means-tested allowance previously awarded on academic merit. As with the earlier scheme the effect of the means test on parents' incomes excludes a considerable proportion of tertiary students from receipt of any allowance. However, in 1975 some 55,000 students in universities and CAEs received some living allowance under TEAS compared to about 25,000 in 1973 under the former scholarship scheme.

5.57 Students who can show they are independent of their parents (e.g. by having supported themselves financially at work or study for

two years) are eligible for an allowance without reference to parents' incomes. Unlike the former scheme, there are no age restrictions on TEAS so that the possibility of re-entry from the workforce to full-time study is increased provided that eligibility conditions are met e.g. persons must be permanent residents of Australia not already holding tertiary qualifications and making satisfactory progress in approved courses. However, the maximum allowances, although supplemented for dependants, are low compared with average earnings.

5.58 The State Education Departments have traditionally offered assistance to those wishing to take up teaching in the state education systems. In the vicinity of 20 per cent of all full-time university students and the very large majority of the teacher education students in the CAEs were in receipt of such awards until recently. Students received an allowance during training which increased from year to year, but they were bonded to serve with the education department on completion of their training. In recent years there has been a reduction in the system of bonding. Some States are now offering small non-bonded allowances for teacher trainees which may be held in addition to allowances under TEAS. The Commonwealth Teaching Service also offers scholarships to trainee teachers. The awards are unbonded with allowances similar to TEAS. On completion of their courses, students are invited to apply for teaching positions in the ACT and NT.

5.59 Commercial and professional organisations and similar bodies offer competitive scholarships, paid educational leave, and cadetships to students. The Australian Public Service as discussed in Chapter 3 operates a study leave scheme for public servants who wish to acquire a qualification. Officers are permitted a certain number of hours off a week on full pay and have statutory fees reimbursed upon successful completion of their units of study. Permanent public servants after successful completion of the first year of a course may apply to the Public Service Board for a free place awarded on a competitive basis to complete their studies on a full-time full-pay basis.

5.60 Students may apply for small emergency loans to tertiary institutions, but government sponsored loan schemes as found in Scandinavia or the USA have not been introduced in Australia. The Liberal and Country parties indicated in their Education Policy in 1975 their intention to 'determine the feasibility of introducing a comprehensive tertiary loans system'. Some private banks provide limited loans for tertiary students.

5.61 A range of information on the forms of assistance available from various organisations is contained in Opportunities for School Leavers, published by Hobsons Press and provided free to secondary schools and government careers advisers.

5.62 Students receiving a taxable income may receive indirect benefits through taxation deductions. Any person may claim a maximum tax deduction of $250 for approved educational expenses and parents may claim up to the same amount for their dependent student children up to 25 years of age. Parents of dependent students up to 25 years of age also receive a rebate of taxation, to be replaced by an increased allowance for child endowment in July 1976.

5.63 The influence of particular forms of finance on the participation of various groups in tertiary education is not clear-cut. Various studies and reports on scholarship schemes, on possible loans schemes and on TEAS have been prepared. It has been argued in Australia and elsewhere that grants to tertiary students only marginally promote equality of access to tertiary education. Most students from low socio-economic background leave school before the completion of the final year of secondary schooling and are usually ineligible for direct entry into tertiary education.

5.64 Some information on the effects of major schemes can be derived from the regional colleges study. When asked directly 'Has finance affected your choice of institution and course? If so, how?' more than 80 per cent of those who entered tertiary institutions in 1974 replied 'No'. Eight per cent said that finance had restricted their choice in some way. The most common type of restriction was the student having to attend the institution in his home town because he was unable to afford to live away from home. Another 8 per cent said that financial aid had been a positive incentive by offering them possibilities which would have otherwise been denied them, but these responses were not related to family socio-economic status.

5.65 Students from high socio-economic status homes were more dependent on financial support from parents. A higher proportion of low status students received TEAS support in universities than in CAEs. On the other hand, a higher proportion of CAE students from all socio-economic classes were dependent on State teacher training awards.

5.66 Financial restrictions probably still limit the participation of lower socio-economic status students in tertiary education, although the restriction is not as great as before the introduction of TEAS in 1974. A survey of students who rejected tertiary places in 1973 (pre-TEAS) showed that one-third considered insufficient finance as the main reason for not accepting the course offered. Lack of finance was also given as the principal reason for choosing to study part-time; more part-time students than full-time students come from a low status background. The under-representation of the children of low status families in full-time tertiary education is evident in a number of countries which have a variety of methods of study assistance. The availability of assistance and the provision of information on tertiary opportunities appear insufficient in themselves to increase the participation of these students.

5.67 Girls are more dependent on state education department awards than boys and less dependent on parental assistance and personal savings. The reduction in 'bonded' awards for teacher training in favour of small non-bonded scholarships might have implications for the attendance of girls at tertiary institutions.

5.68 A survey of the income and expenditure patterns of tertiary students in 1974 indicated that TEAS students and students not in receipt of awards work more often than teacher trainees. Academic performance has been shown to be negatively associated with working more than six hours a week during the academic year.

Provision of Places

5.69 Tertiary institutions make submissions to the Universities Commission and the Commission on Advanced Education for increased funding to provide more places to accommodate rising student enrolments. Universities approach the Universities Commission direct; CAEs usually make their submissions through the appropriate state co-ordinating authority. Where student demand increases for courses already in existence, institutions may make internal adjustments within the limits of their current funding to accommodate the trends.

5.70 Where new courses seem called for, the initiative for their introduction comes from the institutions themselves, although it can sometimes come from the Commissions or from the state co-ordinating authorities. The universities are required to make submissions for funding to the Universities Commission when a proposed new course is likely to be expensive, e.g. when the proposal is for the establishment of a new school or department, especially of a professional nature; if it involves a non-university tertiary institution; if it is a major innovation in university education; and if it is likely to affect the standard of a similar course in another university.

5.71 The Commission on Advanced Education will recommend funds for courses only if it is satisfied that they are of genuine tertiary level and reflect a community need. The accreditation process is entirely independent of the Commission's approval for funding. Courses and awards are first accredited by the advanced education authority in the state or territory in which the courses are offered. After approval at this level, an award may be submitted for registration by the Australian Council on Awards in Advanced Education. The Council is a national body which endeavours to preserve consistency in the nomenclature and standards of courses and awards.

5.72 Neither of the tertiary commissions favours the lengthening of courses unless there are overwhelming reasons for so doing. The Commission on Advanced Education emphasises the need for undergraduate courses to contain only sufficient knowledge required to enter a profession or occupation and not to carry an overload of specialised matter. Similarly, the Universities Commission discourages the lengthening of basic undergraduate courses and believes that any pressure to continually upgrade such courses should be resisted. The Universities Commission commends those universities that have recently shortened their medical courses by one year.

5.73 Although detailed analyses are not available, it appears that the distribution of places between various courses in tertiary institutions generally has responded to student demand, within a few years, with some limitation placed on the more expensive courses. It might be expected that information on the manpower needs of the economy would be considered in the planning of provision of places. However, as indicated in Chapter 3, few data are available on manpower needs for occupational groups. And manpower forecasting, for the longer term required to be useful for tertiary courses, is subject to errors of very great magnitude.

5.74 One area in which estimates of needs and supply have been undertaken is for teachers in primary and secondary schools. As

discussed in Chapter 3 there is the likelihood of an impending surplus. The implications for the provision of tertiary places and the education and employment of girls are likely to receive considerable attention in the near future.

VALUE AND EFFECTIVENESS OF TERTIARY EDUCATION

5.75 This section considers some of the indicators of the value to students of the tertiary education they receive, and notes the current concern for recurrent education and for rationalisation to achieve cost reduction.

Student Satisfaction

5.76 It is difficult to generalise on the value to tertiary students of the years they spend at universities and CAEs. Findings from questions asked of 1973 CAE students in the regional colleges study indicate that most students were satisfied with what was offered, although student concerns were fairly mundane and were mostly focused on such matters as physical facilities, social atmosphere, work-loads, presentation of courses and teaching methods. Issues of a general social nature were not often mentioned nor were examinations and assessment methods. A high proportion of students preferred their present CAE to any other and few found their courses boring. Art and design students and those in liberal studies were the most interested in their courses, and those in teacher education and business studies were least so.

5.77 Traditional methods of instruction were employed by most lecturers and were generally approved by the students, although teacher education students were more critical. Satisfaction with teaching they receive was greater in regional than in metropolitan CAEs, and in CAEs where staff more often held tutorials, did research, attended conferences and taught within their fields of specialisation. Although students did not express interest in general social questions, the aims they wanted emphasised in their courses were social and personal development and the acquisition of vocational skills and knowledge. Art, teacher education and liberal studies students wanted more emphasis on the first aim, while applied science, engineering, business and paramedical students wanted more emphasis on the second. It is probable that disparate groups of students attend CAEs for different reasons and the CAE administrators no doubt find it difficult to fulfil their varying expectations.

5.78 Although CAE students did not manifest any great dissatisfaction with their courses until they were probed, their dissatisfaction may be registered by dropping out, discussed below, rather than by active confrontation.

5.79 University students have been more active than CAE students in conducting demonstrations, street marches and sit-ins. The focus of their activities has been social and political issues as well as those concerned with the content and organisation of their courses, examinations and assessment methods and university administration. Little overall information is available on their goals and attitudes to university study, but some findings suggest that many students attend university more out of expectations held for them by parents and

teachers of the university being the next step in their education after secondary school rather than from a pronounced personal commitment to acquiring tertiary qualifications. However, observers see an increasing emphasis in Australian society on demands for self-determination and goals of self-realisation and the extension of these goals to tertiary education where students are demanding more personal and social relevance in their courses.

Wastage

5.80 An indication of this change is the questioning of the value of tertiary education and an examination of the reasons for student drop-out and failure. Student wastage represents a rebuff to the hopes of students in addition to public loss. The then Australian Department of Education and Science and the Australian Vice-Chancellors' Committee published in 1971 The 1961 Study, a study of the 1961 entry to universities. By 1967, 64 per cent of the 8,599 full-time entrants to universities in 1961 had graduated and 5 per cent were continuing studies; 37 per cent had graduated in minimum time. Variations were found between graduation rates for different faculties and for different universities as well as in the graduation rates for students in the same faculties among different universities. The overall graduation rate for women was somewhat higher than for men. About 32 per cent of the entry had discontinued study and of these 37 per cent had discontinued before 1962. The majority of the discontinuing students had failed a full-time year, usually their first year, but 350 who left had passed their last examination and 104 of these were progressing in minimum time.

5.81 In 1964 an investigation was made of students who had entered the University of Sydney on a full-time basis in 1961 and who had discontinued by the end of 1963. For those who replied to the request for information (53 per cent), two main reasons were given by those who left before sitting for the first-year examination and by those who left after failure - financial problems and course difficulty. For students who had passed but left, the two most frequent reasons given were loss of interest and change of objective.

5.82 Financial, personal and domestic difficulties were given as reasons by students dropping out from the University of Melbourne in 1972, but according to a sub-dean's report the major reason was 'personal and intellectual confusion giving rise to general dissatisfaction'. He went on to say that these students were reasonable and intelligent but directionless and lost.

5.83 A sample of students who withdrew voluntarily, that is, were not excluded by failure, during the 1971 academic year from the University of New South Wales was compared with a sample of persisting students at the same University on a variety of factors relating to their family background, academic and extracurricular experiences, personal and career goals and perceptions of the university environment. It was found that drop-outs were not a homogeneous group differing markedly from persisters. Many of the problems faced by drop-outs were also common to persisters. However, a strong discriminant between the two groups was confidence in ability to achieve personal goals, that is, students who persist are more likely to have clear goals which they are confident they will be able to reach.

5.84 This finding is similar to that concerning students at UK universities as discussed by Gordon Miller - a strong career goal orientation is a powerful influence associated with success in university studies. Australia has a considerably higher wastage rate than that for UK universities. Reasons advanced by Miller for the difference include the following: the longer secondary school course in the UK resulting in the greater maturity of UK students; the better staff-student ratios in UK universities; the somewhat greater proportion of the age-group entering universities in Australia than in the UK; the greater numbers of UK students residing in halls; and the predominance of pass students in Australia where they are more frequently examined than in the British honours course and, therefore, more exposed to the probability of failure on the way towards their goal.

5.85 There is little clear-cut evidence at present on the causes of student wastage, and, although a number of more limited studies have been made of pass and failure rates, no later Australia-wide study has been made since The 1961 Study nor has a comparable survey been done of CAE students.

Employment Prospects

5.86 For those who do graduate from universities and CAEs the employment prospects have till recent times been quite good, although certain types of graduate, e.g. in engineering, liberal studies and business studies have experienced some difficulty. Graduates are assisted in finding positions through the employment services at tertiary institutions and the Commonwealth Employment Service.

5.87 Since 1972 steps have been taken to improve the information available on graduate employment. First, the then Department of Labor and Immigration undertook on a regular quarterly basis an analysis of those tertiary graduates who were registered for employment with the Commonwealth Employment Service. (This analysis has now been discontinued.) Second, the Universities Commission collected information from the universities on the likely output of new graduates for up to three years ahead. Third, the Graduate Careers Council of Australia undertook an annual survey of the first employment of graduates. This survey which initially only covered university graduates now includes graduates and diplomates from a number of CAEs.

5.88 Low unemployment rates among graduates probably reflect an increasing insistence by employers on high qualifications for positions which could be done by persons with a lower level of education. Although this insistence implies that graduates are more likely to find jobs than others, it might mean dissatisfaction for the graduate and increased likelihood of unemployment for the less educated in the labour force. Information on graduates seeking improved positions suggests that it is arts, business, engineering and education graduates who are likely to be dissatisfied with their present positions.

Recurrent Education

5.89 Since the Second World War the desire for 'equality of opportunity' has led to increasing financial assistance to tertiary students. As has been noted earlier, a steadily increasing proportion of the 17 to 22 year old age group has come to participate in tertiary studies. Recently, the desire to achieve 'equality of opportunity' has

focused more on the secondary sector with the realisation that many potentially able students do not reach the final years of secondary school. At the same time greater interest is being shown in the need to provide opportunities for recurrent education. The notion that a person acquires a stock of knowledge and skills before entering the workforce which are adequate for his working life has given way to the recognition that occupational skills require refreshing and workers require new knowledge in response to change. A person, therefore, might need recurring periods of education. In addition, those who did not continue to tertiary education after secondary school might with maturity and work experience wish to re-enter full-time education.

5.90 Although the idea of recurrent education is gaining acceptance in Australia, there is as yet little active encouragement of its practice. Assistance under the TEAS scheme is available to those without previous tertiary qualification regardless of age, but the allowances given are not especially attractive to mature students, particularly those with dependants.

5.91 Assistance under the National Employment and Training Scheme as discussed in Chapter 3 is now mainly confined to those with the greatest difficulty in obtaining employment and is subject to a means test. At present there is little assistance available for the tertiary graduate to obtain a further qualification, other than the limited number of awards for graduate study available on a competitive basis to those without a higher degree. The re-introduction of fees in 1977 for students taking second degrees may discourage some students seeking additional qualifications.

5.92 Nor can it be said that external and part-time students are actively encouraged except by a few tertiary institutions. However, the recommendations of the Committee on Open University if implemented would result in a considerable increase in alternative forms of tertiary study.

Rationalisation

5.93 Traditionally, post-secondary education in Australia has been in a number of streams - the universities and CAEs, both clearly tertiary, and technical education and adult education. But recent events indicate a trend towards co-ordination and rationalisation. As noted in Chapter 1, consideration is being given to the proposal that the two tertiary commissions, the Universities Commission and the Commission on Advanced Education, amalgamate to form the Tertiary Education Commission, with the object of promoting the balanced development of the whole area of tertiary education. In Tasmania and WA inquiries have been conducted with a view to seeing all post-secondary education as a 'system' and to ensure that resources are used to provide sufficient diversification to meet community and educational needs and at the same time prevent wasteful duplication of facilities.

DIAGRAM 5.1

LOCATION OF UNIVERSITIES, COLLEGES OF ADVANCED EDUCATION AND OTHER INSTITUTIONS OF HIGHER EDUCATION

INSTITUTIONS IN ALPHABETICAL ORDER

27	Adelaide College of Advanced Education
27	Adelaide, University of
12	Alexander Mackie College of Advanced Education
7	Armidale College of Advanced Education
14	Australian National University
10	Avondale College
22	Ballarat College of Advanced Education
18	Bendigo College of Advanced Education
3	Brisbane Kindergarten Teachers College
22	Burnley Horticultural College
14	Canberra College of Advanced Education
14	Canberra School of Music
2	Capricornia Institute of Advanced Education
12	Catholic College of Education
12	Catholic Teachers College, Sydney
23	Caulfield Institute of Technology
32	Churchlands College of Advanced Education
32	Claremont Teachers College
12	College of Law, The
23	College of Nursing, Australia
3	College of Nursing, Queensland Branch
12	Cumberland College of Health Sciences
5	Darling Downs Institute of Advanced Education
17	Dookie Agricultural College
23	Emily McPherson College
12	Film and Television School, The
27	Flinders University of South Australia
23	Footscray Institute of Technology
24	Gippsland Institute of Advanced Education
12	Good Samaritan Teachers College
21	Gordon Institute of Technology
13	Goulburn College of Advanced Education
32	Graylands Teachers College
3	Griffith University
12	Guild Teachers College, The
12	Hawkesbury Agricultural College
1	James Cook University of North Queensland
3	Kelvin Grove College of Advanced Education
27	Kingston College of Advanced Education
12	Kuring-gai College of Advanced Education
23	La Trobe University
23	Leo Cussen Institute for Continuing Legal Education
23	Lincoln Institute

19 Longerenong Agricultural College
3 McAuley College of Teacher Education
12 Macquarie University
21 Marcus Oldham Farm Management College
23 Melbourne, University of
12 Milperra College of Advanced Education
11 Mitchell College of Advanced Education
23 Monash University
3 Mount Gravatt College of Advanced Education
32 Mount Lawley Teachers College
12 Mount Saint Mary College
32 Murdoch University
31 Muresk Agricultural College
27 Murray Park College of Advanced Education
12 National Institute of Dramatic Art
12 Nepean College of Advanced Education
7 New England, University of
12 New South Wales Institute of Technology
10, 12 New South Wales State Conservatorium of Music
12 New South Wales, University of
10 Newcastle College of Advanced Education
10 Newcastle, University of
3 North Brisbane College of Advanced Education
6 Northern Rivers College of Advanced Education
12 Nursery School Teachers College
9 Orange Agricultural College
23 Prahran College of Advanced Education
23 Preston Institute of Technology
4 Queensland Agricultural College
3 Queensland Conservatorium of Music
3 Queensland Institute of Technology
3 Queensland, University of
15 Riverina College of Advanced Education
28 Roseworthy Agricultural College
23 Royal Melbourne Institute of Technology
14 Royal Military College, Duntroon
27 Salisbury College of Advanced Education
22 School of Forestry, Creswick
12 School of Medical Record Administration
14 Signadou Dominican Teachers College
27, 29 South Australian Institute of Technology
23 State College of Victoria
23 Burwood
23 Coburg
23 Frankston
21 Geelong
23 Hawthorn
23 Institute of Catholic Education
23 Institute of Early Childhood Development
23 Melbourne State College
23 Rusden
Larnook School of Home Economics
23 Toorak
27 Sturt College of Advanced Education
23 Swinburne College of Technology
12 Sydney College of the Arts
12 Sydney Kindergarten Teachers College
12 Sydney Teachers College
12 Sydney, University of
26 Tasmania, University of
25, 26 Tasmanian College of Advanced Education
27 Torrens College of Advanced Education
1 Townsville College of Advanced Education
23 Victorian College of Pharmacy
23 Victorian College of the Arts
20 Warrnambool Institute of Advanced Education
32 Western Australia, University of
32 Western Australian Institute of Technology
30 Western Australian School of Mines
32 Western Australian Secondary Teachers College
10 Wollongong Institute of Education
10 Wollongong, University of
8 W. S. & L. B. Robinson University College
3 Xavier Teachers College
23 YMCA College of Leadership Training

TABLE 5.1

NUMBER OF STUDENTS IN UNIVERSITIES: 1946-75

Year	Higher Degree	Under-graduate	Total Students	Increase on Previous Year	Ratio of Under-graduates to 17 to 22 Years Age Group
				per cent	per cent
1946	151	25,434	25,585		3.5
1947	247	30,230	30,477	19.1	4.1
1948	305	32,148	32,453	6.5	4.4
1949	329	31,420	31,753	-2.2	4.4
1950	496	30,134	30,630	-3.5	4.2
1951	536	31,135	31,671	3.4	4.4
1952	681	28,960	29,641	-6.4	4.2
1953	761	28,031	28,792	-2.9	4.1
1954	855	28,519	29,374	2.0	4.2
1955	1,026	29,766	30,792	4.8	4.2
1956	1,120	33,286	34,406	11.7	4.6
1957	1,357	35,211	36,568	6.3	4.7
1958	1,672	39,820	41,492	13.5	5.1
1959	2,226	44,925	47,151	13.6	5.5
1960	2,770	50,621	53,391	13.2	6.0
1961	3,170	54,502	57,672	8.0	6.2
1962	3,814	59,503	63,317	9.8	6.4
1963	4,551	64,523	69,074	9.1	6.6
1964	5,383	70,805	76,188	10.3	6.7
1965	6,169	77,180	83,349	9.4	6.9
1966	7,560	83,731	91,291	9.5	7.2
1967	9,181	85,328	94,509	3.5	7.0
1968	9,212	91,083	100,295	6.1	7.2
1969	10,535	97,720	108,255	7.9	7.5
1970	11,543	104,087	115,630	6.8	7.9
1971	12,458	110,210	122,668	6.1	8.5
1972	13,029	114,616	127,645	4.1	8.6
1973	13,760	118,797	132,557	3.8	8.8
1974	15,241	127,059	142,300	7.4	9.2
1975	16,604	132,810	149,414	5.0	9.5

Source: Universities Commission, Sixth Report, 1975

TABLE 5.2

NUMBER OF STUDENTS IN COLLEGES OF ADVANCED EDUCATION(a): 1968-75

Year	Total Students	Increase on Previous Year	Ratio to 17-22 years Age Group
		per cent	per cent
1968	44,850		3.5
1969	52,250	16.5	4.0
1970	60,300	15.4	4.6
1971	70,550	17.0	5.4
1972	81,360	15.3	6.1
1973	96,558	18.7	7.1
1974	109,351	13.2	7.9
1975	125,850	15.1	9.0

(a) Includes teachers colleges which became colleges of advanced education in 1973. Figures for teachers colleges are partly estimated.

Source: Universities Commission, Sixth Report, 1975

TABLE 5.3

NEW STUDENTS ADMITTED TO BACHELOR DEGREE COURSES IN UNIVERSITIES WHO DID NOT MEET NORMAL ADMISSION REQUIREMENTS 1973

University	New Students		Number not Meeting Normal Requirements as Proportion of Total New Students
	Number not Meeting Normal Requirements	Total	
			per cent
Sydney	12	3,386	0.4
New South Wales	61	5,179	1.2
New England	295	1,390	21.2
Newcastle	74	959	7.7
Macquarie	117	2,572	4.6
Wollongong	36	513	7.0
Melbourne	1	3,030	-
Monash	1	2,472	-
La Trobe	79	1,819	4.3
Queensland	483	2,899	16.7
James Cook	33	523	6.3
Adelaide	45	2,199	2.0
Flinders	122(a)	909	13.4
Western Australia	290	2,085	13.9
Tasmania	98	678	14.5
Australian National University	47	1,405	3.5
Australia	1,794	32,018	5.6

(a) Includes students with CAE qualifications.

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.48

TABLE 5.4

PERCENTAGES OF MATRICULATION STUDENTS RATING TYPES OF SUBJECTS AS 'VERY INTERESTING' OR 'EXTREMELY INTERESTING' (a) FOR STUDENTS STUDYING A SUBJECT OF THE GIVEN TYPE AND (b) FOR ALL STUDENTS

	(a) For students actually studying given type of subject for HSC		(b) All students (N = 4400)
	N	%	%
Art	(432)	78	33
Biological sciences	(1748)	60	45
Commerce	(457)	53	20
English	(4188)	34	36
Foreign language	(731)	34	22
Humanities and Social Sciences	(3389)	53	50
Industrial arts and crafts	(423)	63	24
Mathematics	(2969)	37	28
Music	(132)	76	31
Physics or chemistry	(2194)	44	22
Secretarial studies	-	-	10

Source: Regional Colleges: A Study of Non-Metropolitan Colleges of Advanced Education in Australia, edited by D S Anderson et al. Vol I, p 157

TABLE 5.5

BACHELOR DEGREE ENROLMENTS IN UNIVERSITIES BY FIELD OF STUDY: 1971-74

Field of Study	1971		1972		1973		1974	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
		per cent		per cent		per cent		per cent
Agriculture	1,829	1.8	1,743	1.6	1,732	1.6	1,879	1.6
Architecture	2,075	2.0	2,175	2.1	2,535	2.3	2,610	2.2
Arts	5,191	34.5	36,546	34.5	37,839	34.6	40,920	35.1
Dentistry	1,234	1.2	1,325	1.3	1,407	1.3	1,488	1.3
Economics	14,767	14.5	15,014	14.2	15,334	14.0	16,636	14.3
Education	4,947	4.8	5,280	5.0	5,880	5.4	6,816	5.9
Engineering	9,406	9.2	9,840	9.3	9,877	9.0	10,266	8.8
Law	5,883	5.8	6,456	6.1	7,013	6.4	7,518	6.5
Medicine/ Therapies	7,417	7.3	7,735	7.3	8,085	7.4	8,427	7.2
Science	18,249	17.9	18,668	17.6	18,515	17.0	18,850	16.2
Veterinary Science	1,013	1.0	1,008	1.0	1,047	1.0	1,091	0.9
Total	102,011	100.0	105,790	100.0	109,264	100.0	116,501	100.0

Source: Universities Commission, Sixth Report, 1975

TABLE 5.6

FULL-TIME STUDENTS IN COLLEGES OF ADVANCED EDUCATION
BY FIELD OF STUDY 1971 AND 1974

Field of Study	1971		1974		
	Number	Proportion	Number	Proportion	Proportion excl. Teacher Ed
Agriculture	999	5.1	1,279	2.0	4.4
Applied Sciences	2,156	10.9	3,135	4.8	10.8
Art and Design	2,283	11.5	3,767	5.8	13.0
Building, Surveying Architecture	1,129	5.7	1,698	2.6	5.9
Commercial and Business Studies	4,059	20.5	6,627	10.2	22.9
Engineering and Technology	4,693	23.8	5,785	8.9	20.0
Liberal Studies	852	4.3	2,836	4.4	9.8
Music	404	2.0	701	1.1	2.4
Paramedical	2,352	11.9	3,118	4.8	10.8
Teacher Education	848	4.3	36,170*	55.5	
TOTAL	19,775	100.0	65,116	100.0	100.0

* Includes enrolments in teachers colleges which became CAEs between 1971 and 1974.

Source: Commonwealth Department of Education

TABLE 5.7

DISTRIBUTION OF UNDERGRADUATE FEMALES AND PROPORTION OF UNDERGRADUATE FEMALES IN EACH FIELD OF STUDY AT UNIVERSITIES, 1960, 1968, 1974
(per cent)

Field of Study	1960		1968		1974	
	Distribution of Females	Proportion of Females in Each Field of Study	Distribution	Proportion of Females in Each Field of Study	Distribution	Proportion of Females in Each Field of Study
Agricultnre	0.6	7.7	0.6	9.7	0.8	18.6
Architecture	0.9	7.1	0.8	9.0	1.0	17.4
Arts	57.2	46.5	63.0	52.9	53.7	57.7
Dentistry	0.6	8.8	0.4	6.4	0.5	16.4
Economics	3.5	7.3	4.0	9.4	6.0	16.8
Education	9.9	33.5	9.2	41.9	12.7	51.3
Engineering	-	0.1	0.2	0.7	0.4	2.0
Law	2.4	11.4	2.1	12.4	3.7	22.1
Medicine/Therapies	8.1	19.4	5.3	20.7	6.5	34.7
Science	16.5	20.6	13.7	22.5	14.0	33.6
Veterinary Science	0.3	7.4	0.6	13.9	0.5	21.6
TOTAL	100.0	23.8	100.0	29.4	100.0	37.2

Source: Universities Commission, Sixth Report, 1975

TABLE 5.8

FEMALE STUDENTS IN CERTAIN FIELDS OF STUDY IN COLLEGES OF ADVANCED EDUCATION 1972-74
(per cent)

Field of Study	1972	1973	1974
	%	%	%
Agriculture	10.1	12.6	16.8
Applied Sciences	13.6	15.0	18.0
Building Surveying and Architecture	8.5	8.3	8.9
Commercial and Business Studies	11.1	11.9	14.2
Engineering and Technology	0.5	0.7	1.0
Liberal Studies	50.1	51.6	54.3
Paramedical	71.4	69.1	70.2
Teacher Education	67.1	65.0	68.0
Music	69.9	70.6	70.1
Art and Design	51.0	52.3	53.7

Source: Commonwealth Department of Education

TABLE 5.9

FULL-TIME, PART-TIME AND EXTERNAL STUDENTS IN UNIVERSITIES 1961-74 AND COLLEGES OF ADVANCED EDUCATION 1968-74

Year	Full-time		Part-time		External		Total	
	Number	Per Cent	Number	Per Cent	Number	Per Cent	Number	Per Cent
				Universities				
1961	30,811	53.4	21,071	36.5	5,790	10.0	57,672	100.0
1962	34,698	54.8	22,455	35.5	6,164	9.7	63,317	100.0
1963	38,900	56.3	23,783	34.4	6,391	9.3	69,074	100.0
1964	44,327	58.2	25,316	33.2	6,545	8.6	76,188	100.0
1965	49,916	59.9	26,492	31.8	6,912	8.3	83,320	100.0
1966	56,037	61.4	28,083	30.8	7,152	7.8	91,272	100.0
1967	58,325	61.2	29,798	31.2	7,257	7.6	95,380	100.0
1968	62,735	61.8	31,807	31.3	6,995	6.9	101,537	100.0
1969	68,348	62.3	34,297	31.3	7,017	6.4	109,662	100.0
1970	73,645	63.1	35,139	30.1	7,994	6.9	116,778	100.0
1971	79,437	64.2	36,022	29.1	8,317	6.7	123,776	100.0
1972	83,595	65.0	36,808	28.6	8,265	6.4	128,668	100.0
1973	86,116	64.7	38,481	28.9	8,529	6.4	133,126	100.0
1974	93,005	65.1	40,845	28.6	9,009	6.3	142,859	100.0
				Colleges of Advanced Education (a)				
1968	11,860	41.5	16,539	57.8	216	0.8	28,615	100.0
1969	12,643	39.5	18,712	58.5	637	2.0	31,992	100.0
1970	15,818	42.0	20,690	54.9	1,184	3.1	37,692	100.0
1971	19,775	44.6	23,192	52.3	1,384	3.1	44,351	100.0
1972	24,684	47.1	25,713	49.1	1,988	3.8	52,385	100.0
1973	29,917	48.6	28,457	46.2	3,203	5.2	61,577	100.0
1973(b)	58,588	61.8	30,970	32.6	5,324	5.6	94,882	100.0
1974(b)	65,112	60.8	35,612	33.2	6,468	6.0	107,192	100.0
				Total Tertiary Students				
1968	74,595	57.3	48,346	37.2	7,211	5.5	130,152	100.0
1969	80,991	57.2	53,009	37.4	7,654	5.4	141,654	100.0
1970	89,463	57.9	55,829	36.1	9,178	5.9	154,470	100.0
1971	99,212	59.0	59,214	35.2	9,701	5.8	168,127	100.0
1972	108,279	59.8	62,521	34.5	10,253	5.7	181,053	100.0
1973	116,033	59.6	66,938	34.4	11,732	6.0	194,703	100.0
1973(b)	144,704	63.5	69,451	30.4	13,853	6.1	228,008	100.0
1974(b)	158,117	63.2	76,457	30.6	15,477	6.2	250,051	100.0

(a) These figures relate to students enrolled in courses approved by the Commission on Advanced Education for the purposes of the States Grants (Advanced Education) Acts.

(b) Includes students in teachers colleges which became CAEs in 1973.

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.27.

TABLE 5.10

CLASSES COMMENCING AFTER 5.00 P.M. AS A PROPORTION OF TOTAL CLASSES BY UNIVERSITY 1973

(per cent)

University	Lectures and Tutorials	Laboratory Classes
Sydney	14.7	6.3
New South Wales	20.3	14.6
New England	3.6	4.0
Newcastle	31.9	23.3
Macquarie	33.5	23.8
Wollongong	31.6	12.3
New South Wales	21.5	12.4
Melbourne	12.5	5.7
Monash	7.9	2.5
La Trobe	14.4	-
Victoria	10.8	4.0
Queensland	25.1	7.9
James Cook	18.9	5.0
Queensland	24.3	7.6
Adelaide	12.4	0.7
Flinders	9.1	18.7
South Australia	12.0	1.8
Western Australia	18.5	13.1
Tasmania	5.4	13.3
Australian National	12.5	11.7
All Universities	17.4	9.6

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.46.

TABLE 5.11

PASS RATES OF PART-TIME AND FULL-TIME STUDENTS IN SELECTED UNIVERSITIES 1972

(per cent)

University	Proportion of Enrolled Students Sitting Examinations		Proportion of Students Sitting Examination who Passed	
	Part-time	Full-time	Part-time	Full-time
Sydney(a)	96.9	98.8	79.4	79.4
Monash	90.8	96.1	93.7	88.3
La Trobe	88.4	94.4	83.9	83.2
Queensland	84.2	91.9	88.7	87.4
James Cook	81.7	95.6	83.7	84.8
Adelaide	86.4	92.3	86.7	86.8
Western Australia	81.9	91.4	88.2	85.7
Australian National	86.8	94.6	87.6	88.6

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.43.

TABLE 5.12

EXTERNAL ENROLMENTS IN TERTIARY INSTITUTIONS BY STATE 1974

State	Universities		Colleges of Advanced Education*		Total	
		Per Cent		Per Cent		Per Cent
New South Wales	4,604	51.1	2,804	43.4	7,408	47.9
Victoria	107	1.2	1,744	27.0	1,851	12.0
Queensland	3,479	38.6	84	1.3	3,563	23.0
South Australia	200	2.2	940	14.5	1,140	7.4
Western Australia	396	4.4	896	13.8	1,292	8.3
Tasmania	223	2.5	-	-	223	1.4
Australia	9,009	100	6,468	100	15,477	100

* Includes former teachers colleges.

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.29.

TABLE 5.13

OCCUPATIONS OF ALL EXTERNAL STUDENTS BY FACULTY AT THE UNIVERSITY OF QUEENSLAND 1973

Occupational Grouping	Arts	Commerce and Economics	Education	Law	Science	Others	Total	Proportion
								Per Cent
Teaching Profession	722	170	962	6	34	1	1,895	57.4
Administrative and Clerical-Government and Other	105	118	19	22	-	1	265	7.8
Armed Services	95	80	32	12	1	1	221	6.7
Home Duties	140	20	42	9	2	-	213	6.5
Engineering Science and Technology	32	144	-	3	4	-	183	5.5
Commerce and Communications(a)	30	57	-	7	-	-	94	2.8
Community Services(b)	56	8	22	2	-	-	88	2.7
Primary Industry	8	43	1	3	3	-	58	1.8
Medicine/Pharmacy	19	9	-	3	3	-	34	1.1
Other Professional(c)	14	28	-	22	-	-	64	2.0
Others or not stated	82	53	26	17	7	2	187	5.7
Total	1,303	730	1,104	106	54	5	3,302	100.0

(a) Includes banking, business, communications, trade and transport.

(b) Includes community services, library work, psychology, religious work and social work.

(c) Includes architecture, dentistry, forestry, law, journalism, veterinary science.

Source: Open Tertiary Education in Australia: Final Report of the Committee on Open University to the Universities Commission, AGPS, 1975, p.41.

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APPENDIX A A QUANTITATIVE VIEW OF THE POPULATION, LABOUR FORCE AND EDUCATION SYSTEM

AUSTRALIAN POPULATION

A.1 The population of Australia at 30 June 1975 was estimated to be 13,506,800. Table A.1 provides the distribution of the population between the States.

A.2 The average annual rate of growth of the population in the period 1961-70 was 1.96 per cent but in the year ending 30 June 1972 the annual rate of growth fell to 1.59 per cent and then continued to fall in subsequent years to reach 1.23 per cent in 1974-75. Falls were recorded in both components of growth, migration and natural increase. The birth rate fell to 17.81 per thousand in 1973-74, the lowest rate since 1938-39, while net migration gains have averaged about 50,000 per year in the past three years compared with an average in excess of 90,000 in the period 1961-71 (1) (Table A.3).

A.3 The population of Australia has tended to concentrate in urban centres and mainly on the south-east coast. Nearly 65 per cent of the population live in the six State capitals plus four other centres and over 85 per cent in urban areas. Queensland and Tasmania are the only two States with more than half their population residing outside the capital city of their state. The degree of this urban concentration and evidence of continued urban growth at the expense of rural areas in the period 1966-71 is apparent in Tables A.2 and A.4.

A.4 Australia has a relatively young population with a median age of 27.2 for males, 28.3 for females and 27.7 for all persons in 1974. At 30 June 1975 it was estimated 28.1 per cent of the population was less than 15 years of age, 63.5 per cent between 15 and 65 years and 8.4 per cent greater than 65 years (Diagram A.1). Borrie in the First Report of the National Population Inquiry notes that with our declining fertility there will be a rapid decline in the proportion in the 0-14 years age group with consequent increases in the proportion in the 15-65 year age group, which mainly comprises the Australian workforce. He suggests the median age of the population would rise to about 31 years by the year 2000 with net immigration of 50,000 per annum(2).

A.5 Migration has been responsible for a large portion of the average annual growth in the Australian population. Since 1946 migration has in fact been responsible for about 40 per cent of the average annual growth rate increase, that is about 0.81 per cent per year compared with 1.28 per cent per year due to natural increase.(3) Details of the structure of the population at 30 June 1971 with respect to country of birth highlight the varied origins of the Australian people (Table A.5). The majority of our migrants come from UK and Eire (42 per cent) and the European countries (43 per cent). It is estimated that about two million people in Australia have direct connection with Italian, Greek, Yugoslav, Maltese and German cultures. In 1971 about 11 per cent of school children had at least one parent whose native tongue was not English.(4)

A.6 Australia has a mobile population. Of the 11 million persons recorded in the 1966 Population Census nearly 5 million had changed their address by 1971, with approximately 1.5 million of these changes involving a move interstate. The main features of this mobility are the movement of persons from the older areas of cities to the newer outer suburbs and the movement from rural to urban centres.(5)

A.7 Table A.6 shows the distribution of the population with respect to level of school attended. The proportion of the population of different ages holding educational qualifications at various levels or enrolled in courses leading to such qualifications (Table A.7) reflect the growth in post-secondary education in recent times.

A.8 Projections of the population were contained in the First Report of the National Population Inquiry. Two such projections are contained in Table A.8 for selected years accompanied by the most recent estimates published by the Australian Bureau of Statistics.

LABOUR FORCE

A.9 The civilian population aged 15 years and over at August 1975 was estimated to be 9,720,400 which represented approximately 72 per cent of the population. Table A.9 indicates the distribution of these persons with respect to sex, marital status and employment status.

A.10 The annual rate of growth of the labour force in the period 1964-73 was approximately 2.5 per cent rising from 4.6 million to 5.7 million. This growth was mainly due to the impact of the first age cohorts from the post-war baby boom, a continued flow of migrants in the main working age groups and the increasing participation of women, particularly married women, in the labour force.

A.11 Although labour force participation increased generally in the period 1964 to 1973 the participation rates for males decreased from 84.3 per cent in May 1964 to 82.0 per cent in May 1973, mainly as a result of higher educational participation and earlier retirement. In contrast the participation rate of females rose from 33.2 per cent to 39.9 per cent in the same period, reflecting a tendency to stay at work after marriage and to return to work after family responsibilities diminish (Diagram A.2).(6)

A.12 The age and marital status structure of the labour force and the actual participation rates as at August 1975 are provided in Table A.10. Persons aged 15-19 years comprised 11.5 per cent of the labour force in August 1975. This proportion is likely to fluctuate in the coming years, however, reflecting the decline in births in the period 1961-66, the sharp increase in 1967-71 and the sharp decline from 1972.

A.13 The industry and occupation distribution of the work force indicates its highly industrialised nature with less than 6.4 per cent involved in rural industries (Table A.11). The proportion of professional, technical and clerical workers has been increasing in recent years while rural workers are proportionally decreasing (Table

A.12). Persons born outside Australia comprised approximately 27 per cent of the labour force in February 1975. The labour force participation rate of this community exceeded that of the Australian born population in all age groups, and both sexes, except 15 to 19 year old males. Their employment is, with respect to the Australian born population, disproportionately concentrated in the manufacturing and construction industries and in the occupation groups tradesmen, production process workers and labourers.(7)

A.14 Australia has a highly mobile work force. An Australian Bureau of Statistics survey in February 1975 indicated that about one person in six (17.5 per cent) in the labour force changed their employment or location of employment in the twelve months prior to the survey. Young people were more susceptible to change with one person in four aged 24 or less holding two or more jobs in the previous twelve months (Table A.13). A similar survey in November 1972 showed that of the employed persons born in Australia 39.8 per cent had been in the same job for five years or more and 24 per cent had been in their current job for less than a year (Table A.14).

A.15 The growth of the labour force in the period 1965 to 1975 has been accompanied by relatively low unemployment. Like most other industrialised countries, however, unemployment in Australia has been steadily rising in recent months and particularly since August 1974. Younger persons as a group in the labour force have been much more susceptible to the effects of a fall in labour demand with 14.7 per cent of persons aged 15-19 years in the labour force being unemployed in November 1975 compared with 4.6 per cent of all persons (Diagram A.3).(8)

A.16 Unemployment rates of persons born outside Australia are higher than for those born in Australia while a greater percentage of females than males are unemployed. The average duration of unemployment in the August quarter 1975 did not vary significantly by age, sex or marital state (Tables A15, A16).

EDUCATION SYSTEM

Schools

A.17 School attendance is compulsory throughout Australia between the ages of 6 and at least 15. The minimum leaving age is 15 years in NSW, Victoria, Queensland and SA and 16 years in Tasmania while in WA attendance is compulsory until the end of the year in which the child is 15.

A.18 Between 1964 and 1974 school enrolments grew at an average rate of 2.0 per cent with a peak of 3.4 per cent in 1967, rising from 2,364,268 to 2,876,326 (Table A.18). This rise was mainly due to the effect of the post-war baby boom but was also influenced by increased participation of non-compulsory aged students.(9) A decelerated rate of growth is forecast in both primary and secondary schools followed by oscillations in total student numbers reflecting the falling births in 1960-66, the large increases in 1967-71 and the sharp fall in 1972-75.

A.19 Schooling is generally co-educational and is provided in both government and non-government primary and secondary and special schools (Table A.17). The State government schools cater for approximately 78 per cent of school children, while the Catholic system provides for the majority of the remainder (17 per cent), the balance attending various private schools.

A.20 The number of teachers in Australian schools has risen from 114,311 in 1969 to 142,370 in 1974 resulting in a reduction from 23.8 to 20.2 in the gross student teacher ratio. (Pre-1969 statistics are not comparable). Teachers generally have completed at least 2-3 years of tertiary training although some teachers have received no formal training (Diagrams A.4., A.5).

A.21 There has been a general increase in the numbers of service and support staff in recent years. Table A.21 provides a general guide to the provision of such staff in 1974.

A.22 The structure of the schooling varies by State within Australia. At the primary level NSW, Victoria, Tasmania and the ACT provide six grades and at the secondary level six forms/years, while Queensland, SA, WA, and the NT provide seven primary grades and five secondary forms/years. Full details of the secondary grade structure in government schools with examination titles and their location in the grade structure, and the average age by grade for 1974 is provided in Diagram 2.1.

A.23 Participation rates of students in upper secondary school have been rising steadily for a number of years, but as Table A.19 indicates, the rates have steadied and in fact fell slightly in 1973 and 1974.

A.24 The proportion of children remaining to matriculation grade within a State has also increased for both males and females as indicated in Table A.20.

Post School

A.25 Post-school education can be undertaken in universities, CAEs and TAFE institutions. Students entering universities have the choice of undergraduate study in various faculties and all universities provide postgraduate courses of study. Enrolments of students at universities almost doubled in the period 1964-74 as a result of demographic pressures and increased participation (Table A.22).

A.26 CAEs provide a high level of professional education but are oriented towards vocational teaching and towards industrial and social needs. Diploma or degree courses in a wide variety of fields such as architecture, administration, librarianship, teacher education and textile sciences, are offered by the 78 colleges in Australia. Enrolments at these institutions have been steadily rising in recent years so that now they represent 7.8 per cent of the 17-22-year-age-group (Table A.23).

A.27 Enrolments at CAEs and universities, the tertiary institutions, represented a total of 18.1 per cent of the 17-22-age-group in 1974 (Table A.24).

A.28 TAFE colleges offer training in all the major industrial skills and in a wide variety of commercial, artistic and domestic occupations. Vocationally oriented courses accounted for 62.4 per cent of enrolments in 1974, the balance being made up of 14.6 per cent in preparatory, 22.5 per cent adult education and 0.5 per cent in professional streams. Nationally comparable statistics have not been available in the past, but in 1974 there were 608,090 course enrolments at the 843 institutions in Australia (Table A.25).(10)

A.29 Table A.26 shows the age distribution of students in three forms of post-school education. It can be seen that students at the colleges of advanced education are generally younger than those at universities and TAFE institutions while TAFE institutions have a large 30-year-old and over enrolment.

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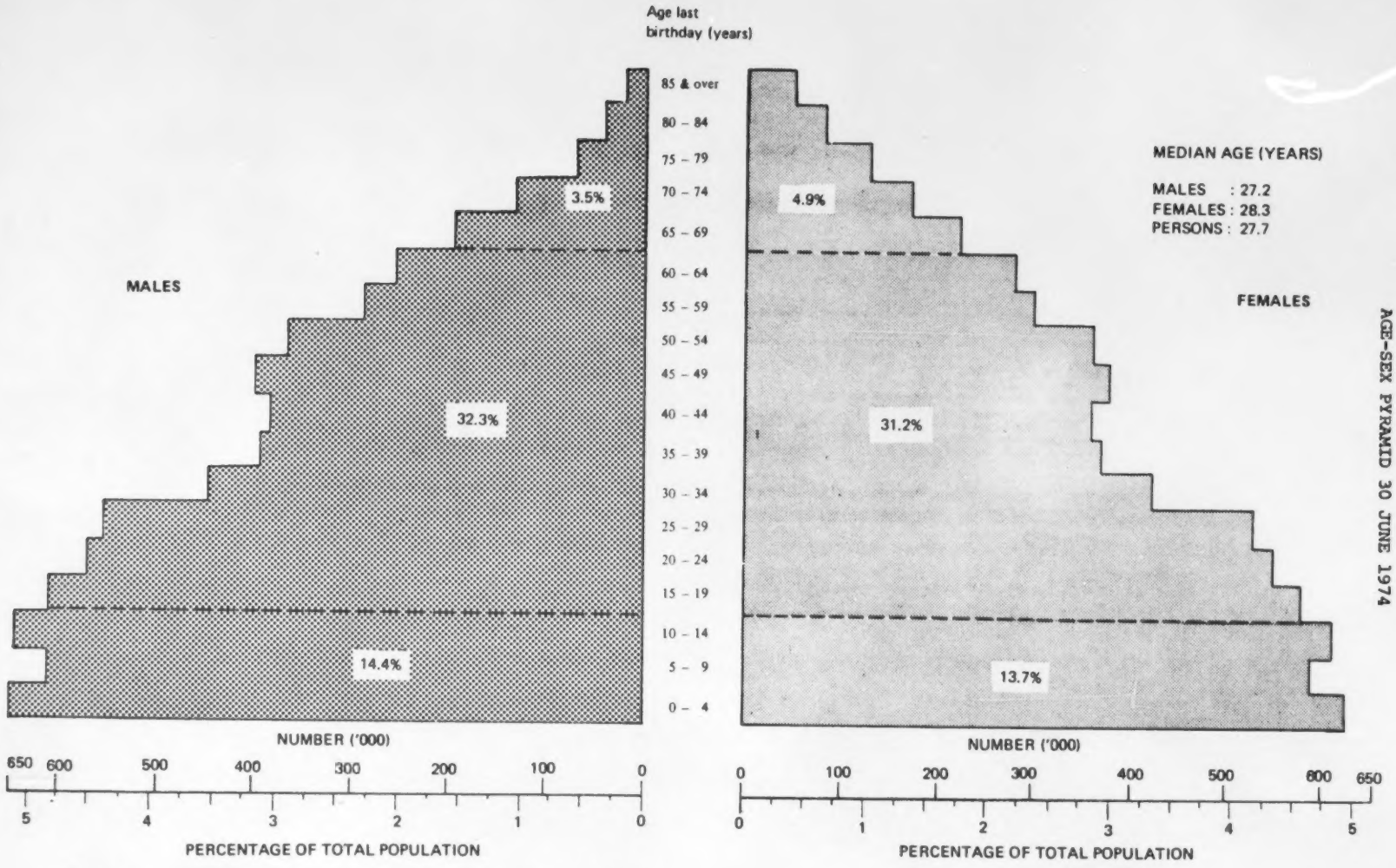
DIAGRAM A.1

AGE-SEX PYRAMID 30 JUNE 1974

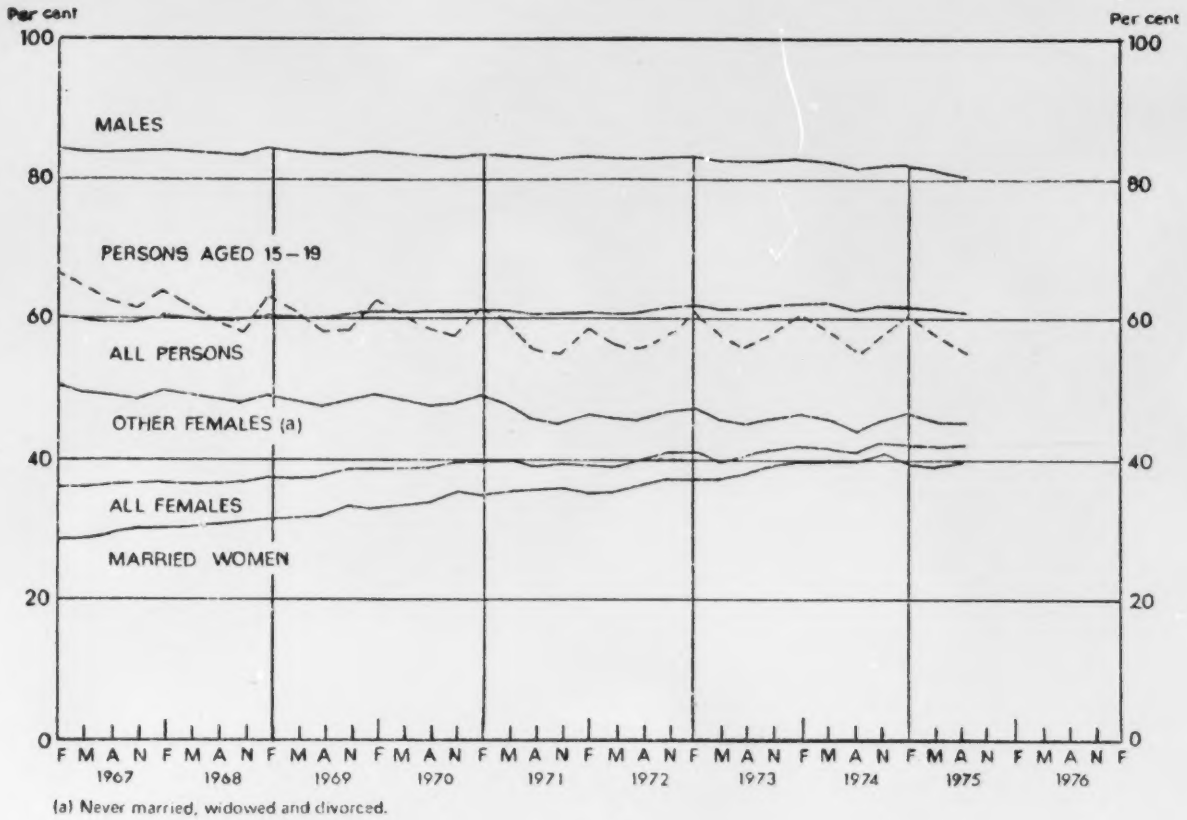


Source: Australian Bureau of Statistics, Ref. No. 4.15

DIAGRAM A.2

LABOUR FORCE PARTICIPATION RATES

(The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group)



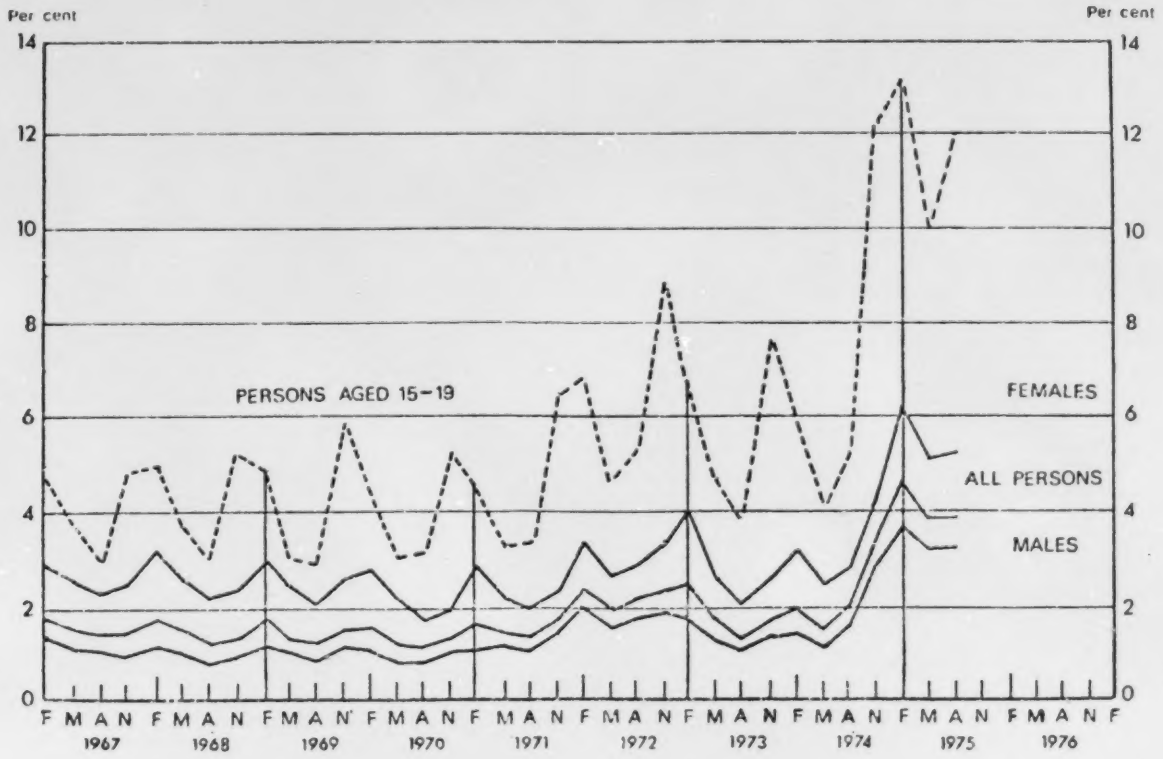
(a) Never married, widowed and divorced.

Source: Australian Bureau of Statistics, Ref. No. 6.20

DIAGRAM A.3

UNEMPLOYMENT RATES

The unemployed in each group as a percentage of the civilian labour force in the same group



Source: Australian Bureau of Statistics, Ref. No. 6.20

DIAGRAM A.4

DISTRIBUTION OF TEACHERS IN PRIMARY SCHOOLS BY COMPLETED YEARS OF TERTIARY STUDY 1974

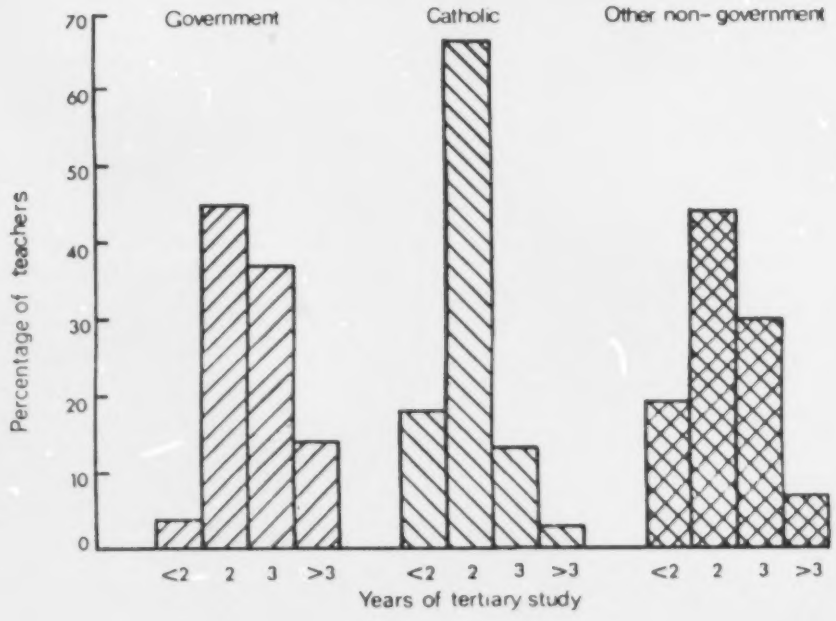
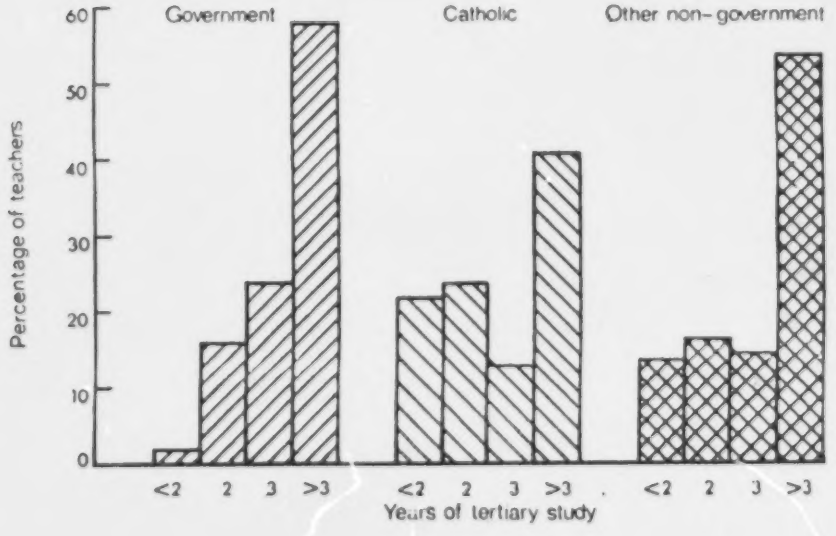


DIAGRAM A.5

DISTRIBUTION OF TEACHERS IN SECONDARY SCHOOLS BY COMPLETED YEARS OF TERTIARY STUDY 1974



Source: Schools Commission, Report for the Triennium 1976-78

AUSTRALIAN POPULATION

TABLE A.1

DISTRIBUTION OF THE POPULATION 30 JUNE 1975*

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Persons ('000)	4,793.2	3,667.7	1,998.5	1,235.0	1,125.8	406.1	88.7	191.9	13,506.8
Per cent	35.5	27.2	14.8	9.1	8.3	3.0	0.7	1.4	100.0

* Provisional
Source: Australian Bureau of Statistics, Ref. No. 4.16

TABLE A.2

URBAN AND RURAL POPULATION 30 JUNE 1971
(Per cent)

	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	AUST
Urban									
greater 100,000	69.05	71.65	44.79	68.97	62.28	33.28	..	97.78	64.50
less than 100,000	19.51	16.07	34.46	15.61	19.25	40.89	64.14	..	21.06
Total Urban	88.56	87.72	79.25	84.58	81.53	74.17	64.14	97.78	85.56
Rural	11.32	12.22	20.55	15.26	18.21	25.72	35.43	2.22	14.31
Migratory	0.13	0.07	0.20	0.16	0.25	0.11	0.43	..	0.14
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Source: Australian Bureau of Statistics, Official Yearbook of Australia, No 59, 1973, p.135

TABLE A.3

ANNUAL RATE OF GROWTH OF POPULATION 1961-75

	Natural Increase	Migration	Total
1961-70	1.19	0.83	1.96
1970-71	1.26	0.81	1.99
1971-72	1.27	0.33	1.59
1972-73	1.12	0.22	1.33
1973-74	1.02	0.56	1.57
1974-75	0.94	0.29	1.23

Source: Australian Bureau of Statistics, Ref. No. 4.11 and Official Yearbook of Australia, No 59, 1973, p.132

TABLE A.4

GROWTH IN URBAN POPULATION 1966-71
('000)

Size of Urban Centre	30 June 1966	30 June 1971	% Growth
Greater 100,000	7,121.3	8,226.8	15.5
25,000-99,999	577.3	730.0	26.5
Less than 25,000	1,918.4	1,958.6	2.1
Total Urban	9,617.0	10,915.4	13.5
Non-Urban	1,982.5	1,840.2	-7.2
Total	11,599.5	12,755.6	10.0

Source: Australian Bureau of Statistics, Official Yearbook of Australia, No 59, 1973, pp.128, 136

TABLE A.5

POPULATION BY COUNTRY OF BIRTH 30 JUNE 1971
('000)

	No. of Persons	% of Total Pop'n
Australia	10,176.3	79.8
New Zealand	80.5	0.6
Europe		
UK and Eire	1,088.2	8.5
Germany	110.8	0.9
Greece	160.2	1.3
Italy	289.5	2.3
Malta	53.7	0.4
Netherlands	99.3	0.8
Poland	59.7	0.5
Other	335.1	2.6
Total Europe	2,196.5	17.2
Other Countries	302.4	2.4
Total born outside Australia	2,579.3	20.2
Grand Total	12,755.6	100.0

Source: Australian Bureau of Statistics, Official Yearbook of Australia, No 59, 1973, p.140

TABLE A.6

POPULATION BY HIGHEST LEVEL OF SCHOOLING ATTENDED 30 JUNE 1971
(Per Cent)

Highest Level Attended	Currently Attend. School			Not Currently Attend. School		
	M	F	P	M	F	P
Child not yet attending school				13.0	12.4	12.7
Level 1	27.3	27.1	27.2	0.6	0.6	0.6
Level 2	9.6	9.6	9.6	0.8	0.8	0.8
Level 3	9.5	9.6	9.6	1.8	1.8	1.8
Level 4	9.3	9.4	9.3	3.1	3.0	3.1
Level 5	9.1	9.3	9.2	13.0	14.4	13.7
Level 6	8.8	8.9	8.9	5.5	5.8	5.6
Level 7	8.6	8.8	8.7	11.9	12.9	12.4
Level 8	7.6	7.7	7.7	17.6	19.3	18.5
Level 9	5.4	5.3	5.3	9.4	9.8	9.6
Level 10 or higher	4.9	4.3	4.6	18.2	14.2	16.2
Total at school	100.0	100.0	100.0			
Other never attended school				0.6	0.7	0.7
Not stated				4.3	4.4	4.4
Total				100.0	100.0	100.0

Note: Level 10 corresponds to years 11 and 12 in each state except Qld, SA and NT where it corresponds to year 12 only. The remaining levels are defined in the source document.

Source: Australian Bureau of Statistics, 1971 Population Census Bulletin 1.9

TABLE A.7

PROPORTION OF THE POPULATION HOLDING EDUCATIONAL QUALIFICATIONS 30 JUNE 1971

Age Group (years)	University Degree(a)		Other Tertiary(b)		Technician Level(c)		Trade Level(d)		Other or None	
	M	F	M	F	M	F	M	F	M	F
15-24	1.58	1.04	1.25	2.73	1.94	2.68	10.98	1.42	84.25	92.13
25-34	4.98	1.86	4.61	5.50	5.40	5.42	23.63	1.94	61.39	85.28
35-44	3.55	1.13	4.51	3.17	4.35	4.47	22.60	1.91	64.99	89.31
45-54	2.91	0.77	3.85	2.20	3.69	3.41	21.15	1.65	68.39	91.97
55-64	2.11	0.66	3.45	2.09	2.57	2.83	17.18	1.32	74.69	93.12
65 and over	1.65	0.42	2.61	1.72	1.74	1.56	11.61	0.84	82.39	95.46
15 and over	2.88	1.03	3.30	3.01	3.38	3.46	17.95	1.54	72.50	90.96

(a) Bachelor or higher degree, or equivalent. (b) Advanced education (tertiary) diploma. (c) Sub-Professional or technician level of qualifications, or equivalent. (d) Qualified to practise a recognised skilled manual trade.

Source: First Report of the National Population Inquiry, Vol. 1, Page 20 and Commonwealth Department of Education

TABLE A.8

POPULATION PROJECTIONS 1976-2001
('000)

	National Population Enquiry		Australian Bureau of Statistics
	NRR = 1, m = 0	NRR = 1, m = 50,000	m = 40,000
1976	13,459	13,614	13,684
1981	13,976	14,406	14,489
1986	14,507	15,235	15,280
1991	15,019	16,063	16,061
1996	15,485	16,865	16,821
2001	15,878	17,612	17,546

Note: NRR is Net Reproduction Rate
m is Net Migration

Source: First Report of the National Population Inquiry, Vol 1, p. 281 and Australian Bureau of Statistics Population Projections.

TABLE A.9

CIVILIAN POPULATION AGED 15 YEARS AND OVER
BY EMPLOYMENT STATUS AUGUST 1975

	Employed	Unemployed		Total Labour Force		Not in Labour	Civilian pop
	('000)	Number ('000)	% of labour force (a)	Number ('000)	% of population (b)	force ('000)	aged 15 & over ('000)
Males	3,748.2	124.6	3.2	3,872.7	80.4	941.3	4,814.0
Married Women	1,246.5	46.6	3.6	1,293.0	40.0	1,940.6	3,233.7
Other Females	693.4	62.3	8.2	755.8	45.2	917.0	1,672.7
All Females	1,939.9	108.9	5.3	2,048.8	41.8	2,857.6	4,906.4
Persons	5,688.1	233.5	3.9	5,921.5	60.9	3,798.9	9,720.4

(a) The number of unemployed in each group as a percentage of the labour force in the same group.
(b) The labour force in each group as a percentage of the civilian population aged 15 years and over in the same group.

Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.10

CIVILIAN LABOUR FORCE BY AGE AUGUST 1975

Age Group (years)	Number ('000)				Per Cent of population (a)			
	Males	Married women	All females	Persons	Males	Married women	All females	Persons
15-19	355.6	22.9	327.9	683.5	58.0	49.8	55.4	56.7
20-24	504.4	179.1	359.0	863.4	89.3	53.5	64.4	76.9
25-34	997.0	375.6	468.5	1,465.5	96.8	42.9	47.2	72.5
35-44	754.8	349.0	395.8	1,150.6	96.8	51.3	53.0	75.4
45-54	730.5	273.8	337.7	1,068.2	94.0	42.7	45.0	69.9
55-59	262.7	62.3	92.7	355.3	88.1	27.1	30.1	58.6
60-64	186.0	22.4	42.6	228.5	69.1	12.0	14.9	41.2
65 and over	81.7	7.9	24.7	106.5	17.0	3.3	3.7	9.2
Total	3,872.7	1,293.0	2,048.8	5,921.5	80.4	40.0	41.8	60.9

(a) The labour force in each group as a percentage of the civilian population in the same group.
Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.11

EMPLOYED PERSONS BY INDUSTRY AND BIRTHPLACE
FEBRUARY 1975

(Per cent)

Industry Division	Born in Australia			Born outside Australia		
	Males	Females	Persons	Males	Females	Persons
Agriculture	9.8	4.3	7.9	2.5	2.2	2.4
Manufacturing	21.7	12.6	18.6	34.7	29.1	32.9
Construction	11.3	1.5	8.0	14.6	1.4	10.3
Wholesale and retail trade	17.8	25.1	20.3	16.2	20.3	17.5
Transport and storage	7.8	2.3	6.0	5.9	1.8	4.5
Finance, insurance, real estate and business services	6.6	10.6	8.0	5.1	8.2	6.1
Community services	8.1	25.0	13.9	7.0	22.8	12.1
Entertainment, recreation, hotels, restaurants and personal services	3.6	11.3	6.2	4.4	9.1	6.0
Other industries	13.1	7.3	11.1	9.5	5.1	8.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.12

EMPLOYED PERSONS BY OCCUPATION AND BIRTHPLACE
FEBRUARY 1975
(Per Cent)

Occupation Group	Born in Australia			Born outside Australia		
	Males	Females	Persons	Males	Females	Persons
Professional and technical	11.1	15.9	12.8	11.1	12.3	11.5
Administrative, executive & managerial	8.5	2.1	6.3	7.7	2.2	5.9
Clerical	9.4	37.1	18.3	6.3	27.1	13.1
Sales	6.5	13.6	8.9	5.2	10.2	6.8
Farmers, fishermen, timber-getters, etc.	11.8	3.9	9.1	3.6	2.2	3.1
Transport and communication	8.5	2.7	6.5	5.8	1.5	4.4
Tradesmen, production-process workers and labourers, those not elsewhere classified	39.7	7.7	28.8	54.1	24.9	44.6
Service, sport and recreation	4.5	16.8	8.7	6.3	19.5	10.6
Total	100.0	100.0	100.0	100.0	100.0	100.0

Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.13

PERSONS EMPLOYED AT SOME TIME DURING 1974:
NUMBER OF JOBS HELD DURING THE YEAR AND AGE
(Per cent)

Number of jobs held during the year	Age group (years)								
	15-19	20-24	25-34	35-44	45-54	55-59	60-64	65 and over	Total
One	75.2	72.0	79.4	84.8	90.7	92.4	95.0	93.1	82.5
Two	17.9	19.8	16.3	12.6	7.9	6.3	4.2	5.4	13.5
Three	4.3	4.9	2.7	1.7	0.9)		*	*	2.4
Four	1.5	1.7	1.0	0.4	*)	1.3	*	*	0.8
Five and over	1.1	1.6	0.7	0.5	0.4)		*	*	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

* Fewer than 4,000
Source: Australian Bureau of Statistics, Ref. No. 6.26

TABLE A.14

EMPLOYED PERSONS(a) BY OCCUPATION AND DURATION OF CURRENT JOB NOVEMBER 1972
(Per cent)

Duration of current job (years)	Professional and technical etc.	Admin exec. and managerial	Clerical	Sales	Farmers fishermen, timber-getters etc.	Transport and communication	Tradesmen etc.	Service, sport and recreation	Total
Under 1	22.6	14.5	26.8	33.7	16.9	22.6	25.1	30.3	24.9
1 and under 2	16.5	11.9	17.3	18.6	7.6	11.8	14.2	18.5	14.9
2 and under 3	12.3	8.8	13.6	9.5	5.7	9.8	9.8	10.4	10.3
3 and under 4	8.1	6.6	8.4	7.2	4.9	7.4	7.0	7.0	7.2
4 and under 5	6.0	4.9	5.5	4.3	4.1	4.3	5.0	5.2	5.0
5 and over	34.5	53.3	28.4	26.7	60.8	44.1	38.9	28.6	37.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Civilians aged 15 years and over
Source: Australian Bureau of Statistics Ref. No. 6.34

TABLE A.15

UNEMPLOYED PERSONS(a) BY AGE AND BIRTHPLACE AUGUST 1975

(Per Cent of Labour Force(b))

Age group (years)	Born in Australia			Born outside Australia		
	M	F	P	M	F	P
15-19	9.9	14.0	11.9	14.9	11.2	13.0
20-24	4.9	6.0	5.4	5.0	7.1	5.9
25-34	2.0	3.7	2.5	2.4	5.6	3.5
35 and over	1.7	1.7	1.7	2.8	4.2	3.2
Total	3.2	5.2	3.9	3.4	5.6	4.1

(a) Civilians aged 15 years and over.
(b) The unemployed in each group as a percentage of the civilian labour force in the same group.
Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.16

AVERAGE DURATION OF UNEMPLOYMENT, AUGUST 1975

(WEEKS)

	Age (years)				
	15-19	20 and over	Married	Not married	Total
Males	11.7	12.6	12.5	12.2	12.3
Females	14.3	11.9	11.7	13.8	12.9
Persons	13.1	12.3	12.1	12.9	12.6

Source: Australian Bureau of Statistics, Ref. No. 6.20

TABLE A.17

NUMBER OF SCHOOLS IN 1974

	Primary Only	Secondary Only	Prim./Sec.	Total
Government Schools	5,775	1,038	482	7,295
Non-government Schools	1,412	338	407	2,157
All Schools	7,187	1,376	889	9,452

Source: Australian Bureau of Statistics, Ref. No. 13.5

TABLE A.18

NUMBER OF PUPILS IN 1964 AND 1974

	Primary		Secondary		Total	
	Number	%	Number	%	Number	%
1964						
Government	1,261,565	77.3	537,376	73.4	1,798,941	76.1
Non-government	370,618	22.7	194,709	26.6	565,327	23.9
All schools	1,632,183	100.0	732,035	100.0	2,364,268	100.0
1974						
Government	1,456,044	80.3	801,801	75.4	2,257,845	78.5
Non-government	357,397	19.7	261,084	24.6	618,481	21.5
All schools	1,813,441	100.0	1,062,885	100.0	2,876,326	100.0

Source: Australian Bureau of Statistics, Ref. No. 13.5

TABLE A.19

PARTICIPATION RATES IN SCHOOLING BY AGE AND SEX

Age (years)	1964			1972			1973			1974		
	M	F	P	M	F	P	M	F	P	M	F	P
15	70.4	63.1	66.9	83.7	81.0	82.4	83.4	81.1	82.3	81.8	81.3	81.6
16	42.3	33.6	38.0	57.8	50.9	54.5	56.5	52.2	54.4	55.3	52.2	53.8
17	20.4	12.9	16.7	34.0	26.5	30.3	32.3	27.6	30.0	31.1	28.2	29.7
18 and over	7.7	2.7	5.3	12.4	6.3	9.4	11.4	6.4	8.9	9.7	6.0	7.9
Total as % of 15-18 age group			32			45			45			44

Source: Commonwealth Department of Education

TABLE A.20

PERCENTAGE OF STUDENTS REMAINING TO MATRICULATION GRADE(a)

	1964	1971	1972	1973	1974
Government - Males	)	28	30	29	28
Females	) n.a.	23	25	27	27
Persons	18	26	28	28	27
Catholic - Males	)	42	42	44	45
Females	)	27	29	32	34
Persons	)	34	35	38	39
	)				
Other Non-govt -Males	)	93	95	95	94
Females	) n.a.	71	78	81	86
Persons	)	82	87	88	90
	)				
Total - Males	)	34	36	35	34
Females	)	27	29	31	32
Persons	)	31	32	33	33

(a) Estimated percentage comparison of the number of students in the final year of secondary schooling compared with enrolments in the first year of secondary schooling five or six years previously.

Source: Commonwealth Department of Education

TABLE A.21

SERVICES AND SUPPORT STAFF(a) IN SCHOOLS 1974

	Government	Non-government	Total
Guidance officers, psychologists, school counsellors	830	80	910
Speech therapists	100	10	110
Social welfare officers	50	40	90
Library advisory and support staff	220	-	220
Other teacher advisory staff	1,000	90	1,090
Miscellaneous	100	-	100
Total professional staff	2,300	220	2,520
Teacher aides	5,100	330	5,430
Library assistants	1,500	280	1,780
Audio-visual assistants	120	90	210
Laboratory assistants	1,100	250	1,350
Clerical assistants	6,300	1,500	7,800
Total ancillary staff	14,120	2,450	16,570

(a) Full-time equivalent

Source: Schools Commission, Report for the Triennium 1976-78, 1975, p.39

TABLE A.22

NUMBER OF STUDENTS AT UNIVERSITIES 1964, 1971-74

	1964	1971	1972	1973	1974
Full-time	44,500	79,437	83,595	86,116	93,005
Other	31,688	44,339	45,073	47,010	49,854
Total	76,188	123,776	128,668	133,126	142,859
As percentage of 17-22 age group	7.2%	9.4%	9.6%	9.8%	10.4%

Source: Australian Bureau of Statistics, Ref. No. 13.7, Part 1

TABLE A.23

NUMBER OF STUDENTS AT COLLEGES OF ADVANCED EDUCATION AND TEACHERS COLLEGES 1971-74

	1971	1972	1973	1974
CAEs - Full-time	19,775	24,678	29,917	65,116(a)
Other	24,576	27,356	31,658	42,086(a)
TCs	24,934	26,970	29,156	2,911(b)
Total	69,285	79,004	90,731	110,113
As percentage of 17-22 age group	5.2%	5.9%	6.7%	8.0%

(a) Increase largely the result of all former government teachers colleges and kindergarten teachers colleges being granted college of advanced education status.

(b) Non-government teachers colleges only.

Source: Australian Bureau of Statistics, Ref. Nos. 13.10 and 13.12

TABLE A.24

NUMBER OF STUDENTS IN TERTIARY INSTITUTIONS 1971-74

	1971	1972	1973	1974
Universities	123,776	128,668	133,126	142,859
Colleges of Advanced Education	44,351	52,034	61,575	107,202(a)
Teachers Colleges	24,934	26,970	29,156	2,911(b)
Total	193,061	207,672	223,857	252,972
As percentage of 17-22 age group	14.6%	15.5%	16.5%	18.3%

(a) and (b) See footnotes (a) and (b) to Table A.23

Source: Australian Bureau of Statistics, Ref. Nos. 13.7, 13.10 and 13.12

TABLE A.25

ENROLMENTS IN TAFE INSTITUTIONS BY ACADEMIC STREAM 1974

Academic Stream	Enrolments	Per cent of total
Professional	3,194	0.5
Para-professional	149,437	24.6
Trades	128,125	21.1
Other skilled	102,141	16.8
Preparatory	88,617	14.6
Adult Education	136,576	22.5
All streams	608,090	100.0

Source: ACOTAFE, TAFE in Australia, 1975

TABLE A.26

AGE DISTRIBUTION OF STUDENTS AT CAE/UNI/TAFE 1974

AGE	C A E		UNIVERSITY		TAFE	
	No. of students	% Age distribution	No of students	% Age distribution	No. of enrolments	% Age distribution
15	5	0.0	25	0.0	22,442	3.8
16	612	0.6	696	0.5	40,751	6.9
17	10,471	9.8	11,677	8.2	57,878	9.8
18	17,137	16.0	19,055	13.3	56,697	9.6
16-18	28,220	26.3	31,428	22.0	155,326	26.3
19	16,524	15.4	17,815	12.5	46,066	7.8
20	12,529	11.7	16,515	11.6	36,026	6.1
21	8,471	7.9	13,073	9.2)		
19-21	37,524	35.0	47,403	33.2)		
22	5,981	5.6	9,176	6.4)		
23	4,767	4.4	7,338	5.1)		
22-23	10,748	10.0	16,514	11.6)		
24	3,996	3.7	5,959	4.2)		
25	3,411	3.2	5,170	3.6)	184,855	31.3
24-25	7,407	6.9	11,129	7.8)		
26	3,095	2.9	4,729	3.3)		
27	2,766	2.6	4,241	3.0)		
28	2,093	2.0	3,304	2.3)		
29	1,893	1.8	2,955	2.1)		
26-29	9,847	9.2	15,229	10.7		
30 and over	11,751	11.0	20,671	14.5	146,467	24.8
Not stated	1,700	1.6	460	0.3		
Total	107,202	100.0	142,859	100.0	590,592	100.0

Notes: CAE and university figures are total students.
TAFE figures are total enrolments - not students - and are only estimates based on tables 3.8 and 3.9 of TAFE in Australia, 1975. Figures are for the six states only. The discrepancy between age components and total enrolment in TAFE is due to rounding of percentage distribution figures.

Source: Australian Bureau of Statistics, Ref. Nos. 13.7 and 13.10 and TAFE in Australia, 1975

APPENDIX B CLASSIFICATION OF TAFE COURSES

ACADEMIC STREAMS

Stream 1 (Professional) - Courses which lead to professional status (including teacher education) or which enable professionals to update their technology or to specialise.

Stream 2 (Para-professional) - Courses provided for those preparing to enter or progress within middle-level or technician occupations. Includes a wide range of 'certificate' courses and some 'special' courses which are similar in complexity and purpose. Includes also short courses designed to enable para-professionals to update their technology or to specialise.

Stream 3 (Trades) - All courses leading to occupations for which apprenticeship exists, and post-trade courses for advanced skills of a non-technician nature.

Stream 4 (Other Skilled) - All other skilled trade and vocational courses relevant to basic principles, skills or knowledge but which are not included in Stream 3. Includes short training courses in additional on-the-job skills.

Stream 5 (Preparatory) - All courses which can be broadly described as preparatory (matriculation and diploma entrance courses), remedial (mathematics, english for migrants, etc), and courses with vocational orientation not classified elsewhere.

Stream 6 (Adult Education) - All courses in home handicrafts, hobbies, self-expression and cultural appreciation, including language courses.

FIELDS OF STUDY

Field 1 (Applied Science) - Includes physics, chemistry, chemical technology, ecology and life sciences, meteorology, mathematics, materials technologies and laboratory services.

Field 2 (Art and Design) - Includes fine and graphic arts; architecture and town planning; materials and media studies (art metalwork, gold and silver smithing, etc.); broadcasting, film making and photographic technology.

Field 3 (Building) - Includes building construction technologies; carpentry and woodwork and timber technology; furniture and furnishings; plumbing, water supply and sewerage courses.

Field 4 (Business Studies) - Includes accounting, banking and financial studies; data processing; management and supervision; marketing and sales; secretarial services and other business studies.

Field 5 (Engineering) - Includes air conditioning; automotive technology; aircraft technology; civil and structural drafting; communication technology; civil engineering; electrical and electronic engineering and drafting; foundry engineering and practice; hydraulic and pneumatic system and engineering; instrument engineering and making; mechanical engineering and drafting, etc; mining technology; marine technology and shipbuilding, non-ferrous metal technologies; production engineering; plant operation; refrigeration trades; surveying; and motor body building and design.

Field 6 (Rural and Horticultural) - Includes agriculture, farm management and sheep and wool studies; horticulture and soil science; fisheries, wild life and veterinary services.

Field 7 (Music) - Includes composition, instrumental music, orchestral groups, choral singing and music theory.

Field 8 (Para-medical) - Includes audiometry; dental laboratory mechanics and services; medical laboratory and services; pharmacy and pharmaceutical services; hospital procedures; and optical fitting and surfacing.

Field 9 (a) (Industrial Services not elsewhere classified) - Includes aircraft and marine operations; clothing, textile and footwear trades and techniques; food processing; printing; watch and clock making.

Field 9 (b) (Personal Services not elsewhere classified) - Includes food presentation; hairdressing; waiter and waitress training; library studies; home economics; physical education.

Field 10 (General Studies) - Includes drama, speech and languages; school subjects taken as part of course not classifiable elsewhere; sociological studies; humanities.

APPENDIX C STATEMENT OF THEME

OECD REVIEW

OF AUSTRALIAN EDUCATION POLICY

Theme

The theme for the review is the transition from school to work or further study. The Country Paper will consider major aspects of education and society that are relevant to the theme. It will place emphasis on the ways in which decisions directly affecting the transition from school are made.

In interpreting the theme it is expected that the examining panel will give specific attention to:

(a) the nature and content of secondary schooling in relation to the transition, particularly the final compulsory years and beyond;

(b) the adequacy of vocational guidance, counselling facilities, and other arrangements to enable students at school and those who have recently left to make informed career and study choices;

(c) job opportunities for young people and the capacity of the employment market to meet the needs of individual workers and society;

(d) access to post-secondary education for school leavers with varying levels of ability and varying educational experience;

(e) the provision of particular programs and opportunities, to assist the transition from school, for special groups such as Aborigines, migrants, and the handicapped.

The theme encompasses all school leavers including those who progress immediately to full-time further study. However, it is proposed that the review should be concerned primarily with the large majority of school leavers who proceed directly to work, including those who embark on a vocation which involves part-time study.

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